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ST. VINCENT STREET CHURCH, GLASGOW
James Thomson
From a photograph by E. R. Jarrett [*A.*]

JOURNAL OF THE
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Journal

During the coming week the Fourteenth Congress of the International Federation for Housing and Town Planning will be held in the R.I.B.A. Delegates from every part of the world will receive papers on the present and future of town planning in all their countries, and will have many opportunities given them of studying the latest work in this country. No one to-day discounts the value of international co-operation in the solution of the problems of housing and town and country planning, since no nation has solved its own problem so completely that it cannot benefit from knowledge of what others have done. It is inevitable, and to some extent desirable, that national characteristics should affect the work in each country, partly because national modes of life still differ and also because there is a dead weight of conservatism in all matters which, like town planning and housing, are largely controlled by local and inexpert councils, which, whatever the colour of their politics, tend to act conservatively in these matters. Members of the Institute who had a chance of seeing housing in Glasgow during the recent conference must have noticed how great is the difference in standards between London and Glasgow tenements. The Scottish tenement is a thing of its own: even "better class" tenements for the professional classes are designed with radically different standards of staircase planning, for instance, from that in vogue in England. The reformer has to take into consideration the sociological results of an increase in luxuries not merely because they increase rents but also because they may involve a complete upset of well established customs which cannot be disturbed without corresponding disturbances of the conservative social balance. Disturbance may be good but it must be deliberate and not accidental.

One thing which the conference may help to show is that, despite the pessimism of those who always compare British housing unfavourably with that abroad, our standards are in many respects in advance of Continental practice. This is shown by the important Ministry of Health Report referred to in the following note and reviewed at length elsewhere in this JOURNAL. But if we have some things to give our visitors we have much to learn, and can do it in no better way than by the interchange of ideas in conference, when not merely the facts of what has been done elsewhere are revealed but the sociological bases to achievement which are as important in assessing its true value.

We should like to refer here to the latest number of the *Town Planning Review*, which contains a series of papers which will add to the material before the Congress. Mr. Wesley Dougill, A.R.I.B.A., the editor, points to the appropriateness of the present time for a congress in England. Never before have housing and town planning had so much attention focused on them by all classes of the community. This is perhaps the renaissance period of English planning. Scientific planning is more widely recognised at its proper importance and housing is invariably a leading cause in all political and sociological debate. The trend of expert opinion is shown by the titles chosen for the papers at the Congress in which the word "positive" has been used to describe "planning that will give an effective direction to the forces of development" instead of merely imposing "a negative and limited control over development." A paper contributed to the Congress by Mr. John Dower with a number of distinguished collaborators representing the British idea of positive planning is printed in this JOURNAL. It is a challenging introduction to the affairs and objects of the Congress, which should receive full attention from members of the R.I.B.A. who are so closely concerned with all that the Congress says and does.

The Interim Report on working-class tenements, reviewed on page 998 of this JOURNAL, is the first document to be published by the important Departmental Committee of the Ministry of Health appointed in July 1934, to inquire into the construction of flats for the working classes. The workings of this Committee are of unusual interest for a reason which is of particular importance to architects and the building industry. For the first time a particular type of building is being subjected to a close scientific study, taking into account all factors influencing it. The study is scientific not only in the sense that technical service is being supplied by the Building Research Station, but also in that costs, habitability, fire resistance, equipment and building organisation, and, in fact, every contributory factor in design and construction, are being considered and properly related to each other. The R.I.B.A. was consulted by the Minister of Health with regard to the personnel of the Committee, which as a consequence is noticeably strong on the architectural side. The profession has reason to be grateful to their representatives on the Committee, who have given their time and knowledge generously to a public service. Members of the Institute can notice again (since it is of frequent occurrence) that it is the Institute, and only the Institute, which is officially recognised as competent to represent architectural opinion.

On 2 July there was a meeting of representative members of the building and allied industries to hear a report from Mr. Sydney Tatchell on the work of the Public Relations Committee of the Building Industries' National Council. The Public Relations Committee of B.I.N.C. is even more than its name would imply. "Public Relations" can mean nothing more than "publicity," a word which has certainly come into its own in recent years very largely through the refining influence of Government publicity work. What the Empire Marketing Board and the Post Office did or do must, we feel, be respectable for less official organisations. But B.I.N.C.'s Public Relations Committee does much more than advertise the existence of B.I.N.C. It can, in fact, be said to fulfil one of the purposes for which B.I.N.C. was established—to provide a point of contact between all sides of the industry and the community, not merely to tell the public what fine fellows the members of the industry are or merely to sell more building—both of those things can be done and are being done with considerable success.

Public Relations work is very much more essential than either of those duties. The building industry does not stop short at some point to exclude the public. Every member of the public who is involved in building work as a building owner or client is a unit in the industry. B.I.N.C. by closing the gap between those professionally or industrially concerned in the industry as "producers" and those engaged as "consumers" can do an invaluable service. Putting it another way, one of B.I.N.C.'s services can be to show that the community and industrial interests in building correspond.

It is unfortunate that the consumer interest can never be adequately represented on any council, which makes it more necessary than ever for the producer side to take the initiative in assuring that close touch is maintained with the "public or consumer" side of the industry. There is a long way to go yet before anything like complete community of interests can be attained; among the biggest obstacles are the signs of conflicting interest that still exist in, for instance, ribbon building in which certain sides of the building world and certain landowners and certain householders are endeavouring to profit at the expense of the community. The Government may or may not succeed in putting a stop to this. But the Government only has to enter in because the building community failed to realise what a mess it was causing. B.I.N.C. specialises in statistical surveys and is the only body in the industry to do so, if we except the housing statistics collected by other organisations such as the N.H. and T.P. Council. If B.I.N.C. uses its statistics wisely, which means, in effect, if the industry is intelligent enough, with B.I.N.C.'s guidance, to understand them, there is a reasonable hope that the affairs of the industry will move more sanely in the future to the social benefit of every part of it, from the industrial magnate to the owner of a speculatively built house.

"Architecture between two schools" was the characteristic aphorism used by Professor Richardson to describe the position, literally and metaphorically, of his School of Architecture, the Bartlett School, at the opening of an interesting exhibition of work from the various architectural, town planning and art departments of University College, London, on Wednesday, 3 July. On one side is the Slade School, probably the most famous art school in the country, to provide a leavening of free art into the more solid material of architecture, and on the other is the University School of Engineering to provide the sobering influence of steel and concrete calculations. In between, of course, is Professor Richardson himself, and that makes all the difference.

The Exhibition was opened by Dr. D. S. MacColl, who naturally spoke—being as it were a godfather of the Slade—of the work of the painters and sculptors, but Professor Richardson had his say, too, to bring forward the claims of the architectural school and the town planners. This, we believe, is the first time that the Slade, the Bartlett and the Town Planning school have combined for an exhibition. Dr. Alan Mawer rightly said that they had no need to apologise for seeking publicity. Artists and architects must have publicity if their services are to be used to the full by a reluctant community. The whole business of "getting across" is not yet part of the curriculum—at least not part of the advertised curriculum—of our architectural schools, but it soon may be and is perhaps a proper corollary of the realism which makes the town planners under Professor Adshead and the architects under Professor Richardson so wisely concentrate a greater part of their energies on the solution of real problems framed on real demands, and yet relate them to the imagination and fantasy of painters and sculptors in the Slade.

For one reason and another it has been left to the so-called "newer Universities" to give the arts the prominence in their curriculum that every architect, certainly, would acknowledge that they deserve. Only those who in Oxford or Cambridge have battled with the inertia of pedagogic indifference to art—contempt, perhaps, bred from familiarity—can really know how far art and education can be divorced. There is a precise difference between "Arts" and "Art" that cannot perhaps be defined philologically; the difference merely is that an Arts degree has next to nothing to do with Art, in some ways less than the engineering school which is helping to mould the futures of Bartlett students.

This is getting far away from the exhibition of work at University College, and anyhow is only useful in pointing out one of the most striking features of architectural education at University College, namely, that the students are not only working in the middle of a community of people studying all subjects, but have definite contacts with all ancillary branches of learning and must, as a consequence, find their whole conception of architecture and town planning broadened by an understanding of other points of view.

POSITIVE PLANNING IN GREAT BRITAIN

BY JOHN DOWER, M.A., A.R.I.B.A.

A PAPER SUBMITTED TO THE INTERNATIONAL CONGRESS FOR HOUSING AND TOWN PLANNING AT THE R.I.B.A., 16–21 JULY 1935

Written in collaboration with Professor Patrick Abercrombie, M.A., F.R.I.B.A., P.P.T.P.I., Thomas Adams, Dr. Eng., F.R.I.B.A., F.S.I., P.P.T.P.I., Sir Basil Blackett, K.C.B., K.C.S.I., Sir Theodore Chambers, K.B.E., F.S.I., W. R. Davidge, F.R.I.B.A., F.S.I., A.M.Inst.C.E., P.P.T.P.I., R. Hardy-Syms, F.S.I., L.R.I.B.A., Sir Herbert Humphries, K.B.E., M.Inst.C.E., P.T.P.I., F. J. Osborn, Sir Arthur Salter, K.C.B., W. Harding Thompson, M.C., F.R.I.B.A., M.T.P.I., and Sir Raymond Unwin, P.P.R.I.B.A., P.P.T.P.I.

SUMMARY OF CONCLUSIONS

A system of town and country planning that merely imposes a negative and limited control over development is insufficient; it requires to be supplemented by a more positive planning that will give effective direction to the creative forces of development. The broad objective of a positive planning system should be to provide a physical setting of towns, villages, and open country adequate for the present and foreseeable needs of balanced economic and cultural communities. This can only be achieved by effective control over urban location and growth. Both central congestion and suburban wastage should be attacked by a planned redistribution of industry and population, in order to create a sufficient supply of new towns, both independent and satellite, compactly but openly developed on a background of permanent agricultural and other open country, and to de-congest and remould existing towns, so far as possible to a similar form.

1. THE EXISTING TOWN AND COUNTRY PLANNING SYSTEM

To judge the existing form of statutory planning in Great Britain under the Town and Country Planning Act, 1932, incomplete and inadequate, without some more positive purpose, is not to belittle the strenuous and far-seeing efforts of those who have brought it, through many difficulties, to its present position. A long campaign was first required to persuade the nation that deliberate action, to remedy the widespread and growing misuse, waste and ugliness in land and buildings, had become essential. When action followed its preliminary stages were, of necessity, limited and tentative, since the knowledge and technique needed for wider and stronger measures could only be acquired through practical experience.

Now, after some 25 years of trial and growth, the planning system has reached a relatively secure position as a factor of major importance in the organisation of the nation's life. But with increasing Parliamentary sanction and administrative scope it has more and more assumed a restrictive and negative function. What has come to be its main objective—the prevention of the more obvious and serious forms of misuse, waste and ugliness—is admittedly a vital national purpose which is still far from realisation: but it is patently too limited an objective. It may, indeed, be doubted whether negative restriction, without a positive counterpart, can ever be really effective: the creative and progressive forces in the national life can find no satisfaction in so barren an activity.

In addition to its general lack of positive purpose the existing planning system suffers, *inter alia*, from the following limitations and defects: (*a*) Its permissive character and consequent piecemeal application; (*b*) its frequent operation by individual local authorities over inconveniently small and arbitrary areas and consequent lack of regard for wider regional and national requirements; (*c*) its general lack of co-ordination with the agencies directing public and private developments in housing, industry, commerce, transport, public utility services, agriculture, afforestation, recreational facilities, etc.; (*d*) its financial weakness (more especially through the provision that compensation for reduction in property values through planning shall be paid by the authority in full and immediately, while betterment for increase in property values shall be paid to the authority only as to 75 per cent. and on realisation, through change of use or ownership during a limited period); and (*e*) misconception of the purpose and technique of planning by many of those charged with its operation.

It is concluded that planning schemes under the existing system, unless it is substantially strengthened and supplemented, will be inadequate both for the preservation of agricultural and other open country and for the encouragement of compact, orderly and seemly building development.

2. PROGRESS OF UNPLANNED DEVELOPMENT

Meanwhile developments of every kind have been and are proceeding either without plan or to "compartmental" plans (limited to the particular function or

locality without regional or national co-ordination); in particular (*a*) most of the 2,500,000 post-war houses have been built either in dormitory suburbs without industrial *raison d'être* or in scattered and ribbon formation without regard for transport, public utility services, or other social requirements, while the congestion and slum conditions of central residential districts, especially in the larger industrial towns, have remained substantially unrelieved; (*b*) new industrial undertakings have been similarly scattered in suburban districts or have increased the congestion and slum conditions by infiltration of central residential districts and have helped to create the "depressed areas" and other national economic dislocations by their concentration on London and the South; (*c*) a large part of the vast expenditure on roads has been wasted by "compartmental" planning (tending to the fundamental error of "traffic for traffic's sake") and by failure to control frontage development on new by-pass, arterial, and other main roads; (*d*) similar waste has occurred through "compartmental" planning of railways, electricity supply, water supply, land drainage, afforestation, etc.; and (*e*) the scattered and ribbon extension of uncontrolled development has destroyed or damaged the landscape beauty and agricultural usefulness of wide areas of open country, and has permanently impaired the adequate provision of public open spaces and aerodromes. The broad results of such unplanned development are increasing congestion at the centre and waste at the circumference of every large town, with a rapid loss of both urban and rural amenities: to its progress, especially to its chaotic concentration on the Greater London area, the existing planning system makes no effective resistance and offers no adequate alternative. Moreover, the limited powers that have been available have been used by many local authorities for narrow local purposes, without regard for wider considerations, and often merely for interested and competitive efforts to increase their individual importance and rateable values.

3. The Present Favourable Opportunity

The present time is especially favourable for strengthening and supplementing the existing planning system, since (*a*) the national finances are stable and large supplies of capital at low rates of interest are available for sound reconstructive efforts, which the nation is anxious to undertake, not only on their own merits, but also as the best available means of reducing unemployment; large-scale programmes to increase efficiency and secure safety in the road system, to modernise and electrify the railway system (especially in Greater London), to lay down the ground pattern and equipment for an airway system, and to improve water supplies and other public utility services are already being initiated or prepared; (*b*) the nation has already undertaken a determined campaign for the abolition of slums and overcrowding through systematic programmes for rehousing activity by local authorities under an improved central direction, and is ready for a more radical attack on the "depressed areas" problem, which must involve the imposition of some degree of national control over the location of industry; (*c*) there has been a rapid growth in national or large-scale organisation, for marketing and other purposes, of the agricultural and other industries, and of transport and public utility services, which reflects a national readiness for a greater measure of economic planning, and, by implication, of the town and country planning that should logically accompany it; (*d*) there is a growing demand for out-of-door recreation, as a use for the increasing amount of leisure time, and a consequently growing insistence on an adequate provision of public and private playing-fields and of municipal, regional and national parks; and (*e*) the existing planning system, though faulty and inadequate, is at least well established and in course of application over a large part of the country; though it has not yet achieved the full force of a popular movement, it has many skilful and enthusiastic supporters and exponents, and is sufficiently acceptable to public opinion for the next stage of its expansion to be prepared.

4. The Objective of Positive Planning

The broad objective of a positive planning system should be to provide a physical setting of towns, villages and open country adequate for the present and foreseeable needs of balanced economic and cultural communities. This can only be achieved by effective control over urban location and growth. Both central congestion and suburban wastage should be attacked by a planned redistribution of industry and population, in order to create a sufficient supply of new towns, both independent and satellite, compactly but openly developed on a background of permanent agricultural and other open country, and to de-congest and remould existing towns, so far as possible to a similar form.

While the existing planning system falls far short of this broad objective, it is essential that the new and more positive policy and machinery should be evolved from the existing framework. The temptation to postulate a fresh start must be avoided. The objective of planned redistribution has been developing in the minds and writings of planners for more than half a century and has found valuable, if limited, expression in such pioneer planning efforts as Port Sunlight, Bournville, Letchworth, Welwyn and Wythenshawe: though it has not yet sufficiently overcome the inertia of *laissez-faire* opinion and the short-term attractions of existing centres of population and of ribbon development to obtain any general acceptance or application, it is at least implicit as a general ideal in the existing system. In order that the ideal may be converted into a more specific objective, for early realisation in practice, the broad essentials are that the planning system should pick up effective control and guidance over the various types of current and prospective development, so far as concerns their use of the land, should fix—more precisely than at present—the

most suitable locations for the various types of development in schemes at once comprehensive and capable of practical execution within a limited term of years, should carry through to the execution stage, so stimulating and controlling the various types of development that they fit with each other both in physical pattern and in pace, and should find expression in architectural ideas worked out over whole units of development.

More limited "key-points" of attack are, however, required for immediate action. The typical defect, other than their general lack of powers and of financial resources, of post-war planning efforts has been over-concentration on residential and local aspects with a corresponding disregard for industrial and national aspects. It is therefore concluded that immediate efforts should concentrate (*a*) on obtaining effective control over industrial location, and (*b*) on creating an effective machinery for the national direction of town and country planning.

5. Control of Industrial Location

It is clear that new towns cannot be healthy and efficient organisms unless their sites are well chosen for industrial development and their industries and populations grow in pace with each other. Equally, old towns cannot be made healthy and efficient unless steps are taken to prevent an excess or deficiency of industry and, in many cases, unless slum clearance is applied not only to worn-out dwellings but also to worn-out workshops and factories. To achieve these purposes some degree of control over the location and density of industries is obviously essential, while a wider control over the national distribution of industries will be required, if the "depressed areas" problem is to be adequately tackled. Nevertheless, control of industrial location is a relatively new idea, not yet accepted by the nation, and it is obviously capable of very ill effects if unwisely or excessively applied. It should be planned and operated on a national basis, since individual towns and regions are too self-interested to apply it soundly in the national interest without central control: it should be applied in the first instance to directing new industrial enterprises to a choice of suitable locations (the removal of existing enterprises and direction to specific locations following later as found necessary): and it should proceed tactfully, flexibly and by persuasion rather than force. The emphasis should be on the active encouragement of industries to establish themselves in suitable locations by such means as (*a*) the reservation of ample and convenient industrial sites, at low purchase or leasehold costs and so laid out and subdivided as to give room for easy expansion; (*b*) the provision of ample and convenient transport and public utility services, and in some cases of unit-type factory buildings for renting by smaller enterprises; (*c*) the promise by public authorities of ample and convenient housing, shopping, recreational, etc., facilities and general residential amenities for workers and their families, related in place and time to industrial development; and (*d*) the offer of low charges for power, light, water, etc., services from the start (in anticipation of future bulk demands), of loans at low interest rates to meet expenditure on buildings and fixed plant and, in some cases, of subsidies to meet removal and other initial costs. Industrial development in unsuitable locations should be discouraged by the witholding of such facilities, reinforced as necessary by the prohibition, save in special circumstances, of new industrial enterprises or of major extension of existing enterprises in congested areas and in districts of special landscape or agricultural value.

6. The Machinery for Positive Planning

The local authorities acting either individually or in groups with joint committees are the responsible authorities for planning under the existing system. They have a large discretion in deciding whether or not to apply their planning powers to any particular area, and in deciding what machinery they will adopt for the purpose. Though their formal actions and their planning schemes require the approval of the Minister of Health, who issues regulations and model clauses to ensure a general uniformity of procedure, technical terminology, etc., throughout the country, and persons aggrieved by planning restrictions have certain rights of appeal, there is no central authority charged with any positive planning functions. An advisory committee has, indeed, recently been set up by the Minister, but only for consultation on specific matters. A strong regular central authority is required, as recommended in the recent report of the Committee on Garden Cities and Satellite Towns. This "Town and Country Planning Board" should be responsible for the preparation of a national master-scheme of town and country planning, with special reference to the location of industry and of housing, and for the general direction and co-ordination of regional and local planning schemes, in conformity with the master-scheme. It should give special and urgent attention, through an *ad hoc* committee, to industrial location in relation to "depressed areas," the growth and congestion of Greater London and other problems. The Board should be attached to the appropriate State Department, at present the Ministry of Health, and directly responsible to the Minister. As soon as practicable, the Ministry itself should be reorganised as a Ministry of Planning Services, charged with the supervision of town and country planning, housing, transport, public utility services, ordnance and geological surveys, etc. (the Ministry of Transport being absorbed, and the remainder of the Ministry of Health being formed into a separate Ministry of Social Services, possibly in combination with the Board of Education). The Town and Country Planning Board should be in close contact with any Economic Planning Board or Industrial Development Board that may be set up to advise the Government, with the Board of Trade, Ministry of Labour and Special Areas Commissioners,

with the Ministry of Agriculture, with the Railway Companies and other transport organisations, and with the central and regional authorities for electricity supply and other public utility services.

Subject to such provision for stronger central direction, the administration of positive planning should remain in the hands of the larger local authorities, normally the county and county borough councils and not the rural and urban district councils, though with provision for other single or joint units where found desirable. A necessary and urgent preliminary to efficient administration is a thorough revision of administrative boundaries (far more radical than the "review of county districts" now proceeding), more especially with the object of creating in all parts county and county borough units of adequate size, compact shape and closer relation to physical and economic units. Provision should be made for the close co-operation, by representation on the responsible committee or otherwise, of the smaller local authorities and of all important local organisations concerned with development in housing, industry, commerce, transport, public utility services, agriculture, afforestation, recreational facilities, etc., and with the preservation and enhancement of civic and landscape amenities. The method of operation should be evolved from the existing system and machinery of town and country planning: and it should be flexible enough to allow either municipal or public utility or private enterprise, separately or in combination, to be the constructive agents of planned development under its direction and stimulation.

Though substantial improvements in the working of the planning system could and should be made by administrative action without need for fresh legislation, a new Town and Country Planning Act would be required to give general effect to the proposals here put forward. The preparation of the necessary Bill should be initiated at once. A considerable part of its subject matter has been covered by the recent Report of the Committee on Garden Cities and Satellite Towns (H.M. Stationery Office, 1935, price 6d.). The proposals in this report are in many respects similar to those here put forward, though they appear unduly limited by (*a*) insistence on exclusively municipal ownership and enterprise; (*b*) restriction to satellite, as distinct from independent, location for new towns; (*c*) lack of provision for specific control over industrial location; (*d*) lack of connection between the proposals for satellite town development and the general town and country planning system. It is vitally important that the new legislation should cover the whole planning system on a comprehensive basis. Such *ad hoc* measures as the Ribbon Development Bill now under discussion (however much justified by a state of emergency, which should never have been allowed to arise) are most undesirable. The central purpose of planning is the co-ordination of all agencies concerned with the use of development of land.

Brig of Doon

Notes on the Construction of Cheap Furniture

BY DAVID BOOTH, A.R.I.B.A., A.A.DIP.

The following notes are concerned with the problems of designing cheap furniture for production in comparatively small quantities. Cheap furniture, unfortunately, is usually synonymous with shoddy furniture; the furniture trade with its craft tradition has never acquired, so far as its cheap productions are concerned, the standards of precision and quality which are applied to mass-produced articles in newer industries such as plastics, motor-cars, radio. There appears to be no published scientific research available on the technique of cabinet making apart from the valuable work of the F.P.R.L. on materials and, more recently, on wood surfacing. In the trade, while principles of traditional hand-made furniture are well established, methods of cheapening production vary with different districts and different shops, and largely depend on, and are limited by, individual opinion and experience. In default of the authoritative research which the subject demands, any notes on the construction of economical but well-made furniture are necessarily tentative.

ARCHITECT-DESIGNED FURNITURE

It appears to be the usual practice for architects in obtaining estimates of specially designed furniture to provide only profile drawings and very brief specifications of material and finish, on the reasonable assumption that the manufacturer's specialised knowledge and experience may be left to work out the appropriate construction. For the most expensive class of work, where only firms of high standing are employed, this procedure gives satisfactory results. In work where low price is an important factor it suffers from obvious disadvantages; on the basis of sketch designs and loose specifications manufacturers who will give low prices, and correspondingly low quality, can always be found. Under these conditions the architect has no control of the methods employed in reducing the cost and no redress if the finished work is unsatisfactory in construction and workmanship. Full working drawings and specifications will ensure fair tendering and complete control of the job, but imply an intimate acquaintance with production technique on the part of the architect that cannot reasonably be expected, and it is difficult, in specifications, to define such important factors of workmanship in cabinet making as precision of fit and finish. Perhaps the most satisfactory results are obtained if the architect co-operates directly with the manufacturer; generalisation on this procedure, where so many individual factors may be involved, is unlikely to be of value—except possibly to point out that it is in fact difficult to find manufacturers who are interested in the problems of relating good design and sound construction to cheap price. Without the assistance of an interested manufacturer the architect—as opposed to the designer trained at the bench (with the almost intuitive knowledge of woodworking which such training induces)—will be considerably handicapped.

FACTORS IN COST REDUCTION

In considering cost reduction the factors which may be influenced by the designer are (1) materials, (2) labour; and of these his influence on the former is necessarily extremely limited. The subject requires considerable investigation, and can only be discussed briefly in these notes, but it is possibly true to say that the choice lies between the cheaper hardwoods, used in the solid, and deal stained or painted. Laminboard, although widely used, is not cheap in itself (comparable in price with hardwoods such as Japanese oak); it presents structural difficulties (discussed later), and must in addition be veneered or stained or painted, as the standard facing veneers of gaboon or alder vary widely in colour; its important advantage, of course, is stability, a vital factor for veneered work, but not perhaps of first importance where veneers need not be used, as timber movement may be allowed for in designing and the work of the F.P.R.L. on seasoning and moisture changes in timber enables manufacturers to control such movements to a reasonable extent. Deal is not usually considered a cabinet maker's timber (except perhaps in the past as a ground for veneering), but first quality timber does in fact make fairly successful furniture. The important disadvantage is that softwood, which must be painted or stained, shows the wear of ordinary usage quickly and very noticeably, and requires frequent renovation, and for this reason is probably a doubtful economy. Of the cheaper hardwoods oak appears to be most readily obtainable and the most satisfactory in use. Cheap white oak and hardwoods such as birch or beech will require staining in order to obtain uniform colour; as cheap staining, particularly on oak, has usually a poor appearance, it is preferable to use selected timber which may be finished with a wax or clear cellulose polish; although the cost of using selected stuff will probably be greater. Interesting experiments have been made in the use of plywood as a structural material, and in the future it is possible that present technique may be superseded by the increased use of ply shaped and bent to form carcases, etc. In the meantime, the economical use of plywood appears to be restricted to its use as panels

on solid framing, either applied and glued to the frame in a press or grooved into the frame in the traditional way. A recent (and economical) modification of usual practice is in the thickness of ply. It was usually considered "good" work to use ply as thick as possible, but the strength of thick ply is such that, in positions where the framing is not fixed, *e.g.*, doors, table tops, warping or movement in the panel may distort the framing; the tendency, therefore, is to use thinner and consequently weaker ply in order that any movement may be easily restrained. Thin ply has a distressing tendency to "go hollow" between framing, and the closer battening sometimes required to minimise this effect will offset the economy to a varying extent.

The methods of estimating used by manufacturers have an important bearing on the designer's work. The best practice is to estimate timber, labour and overheads, ironmongery, fittings, etc., separately, but it will be understood that careful and detailed estimating on each inquiry must increase the manufacturer's overheads. More approximate methods, of which the simplest is "supering" at inclusive rates, although showing a small reduction in overhead costs, will almost certainly nullify the designer's efforts to reduce labour costs by the detailed designing of construction.

The actual overhead costs of manufacturing can hardly be affected directly by the architect, but the relative overheads will influence the detail designing. The overhead costs of the machine shop, for example, will be considerably more than the cabinet or assembly shop in the same factory, and it will be necessary, at least in small runs, to reduce machining to the simplest operations. These factors, however, may be expected to vary widely in different factories.

A further and important factor in cost reduction, which is beyond the scope of these notes, is the amount of repetition, both of identical pieces of furniture and identical parts. Even in small quantities careful standardisation is necessary; in mass production it would be obviously the dominant factor in design, and in this connection there is a wide field of research to be covered before the mass production of cheap furniture on rational lines can be begun.

As far as materials and manufacturing are concerned, the architect is faced with factors of cost which he cannot reduce, and indeed his influence on choice of material by rejecting the false economy of inferior stuff is likely to keep the cost of this item at a comparatively high figure; high, that is to say, in relation to the material costs of the cheapest type of commercial furniture. It is, therefore, in labour costs that reductions must be made—with again a number of fixed factors such as wage rates to be considered. In considering labour costs, it must not be assumed that an extended use of machinery will necessarily reduce prices or improve standards. In other industries—*e.g.*, metal working—machinery has made possible processes and standards of quality and precision which were impossible in the days of handwork. In cabinet making, on the other hand, the craftsman's work is still the criterion; machinery has tended to follow the processes of handwork, but does not, at least in some processes, attain equal quality. For example, machine planing (and all rotary cutters) produces a noticeably "rippled" surface, which for the best work must be removed by hand-planing and in cheaper work by sanding; machine dovetailing, to take a different example, is apparently weaker than properly cut hand dovetails. Machinery has undoubtedly in the past made possible economies in large-scale woodwork production, but has not made the revolutionary changes in cabinet making technique that might have been expected. It is indicative of the outlook of the trade that although most of the present types of machinery were invented by the beginning of the nineteenth century, published research into the theory of machining was practically unknown until 1932, when the F.P.R.L. issued its preliminary survey, "The Principles of Woodworking."

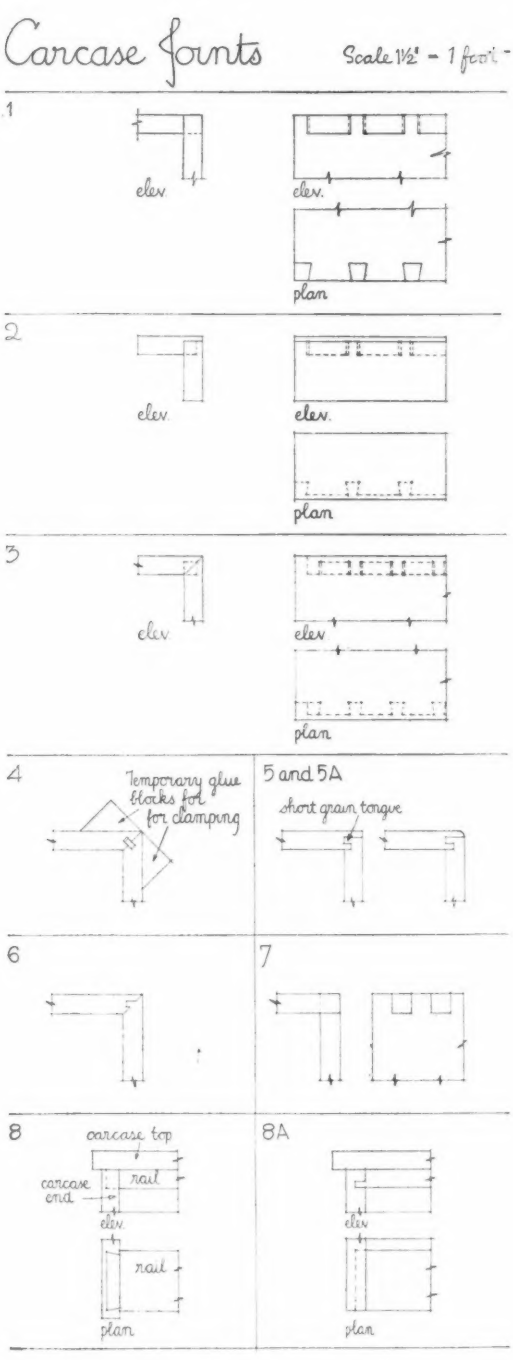
Assuming the methods of construction and accuracy of fit in first class cabinet work as the only possible, although necessarily vague standards, economies in labour are possible in the methods of jointing and the time taken in fitting such items as doors, drawers, etc. In carcase work, for such pieces as chests of drawers, book cases, desks, bureaux, wardrobes, etc., modern design has simplified shapes to flush surfaced boxes, which, while eliminating expensive shaped and moulded work, have demanded considerable care in fitting, as small inaccuracies are immediately noticeable.

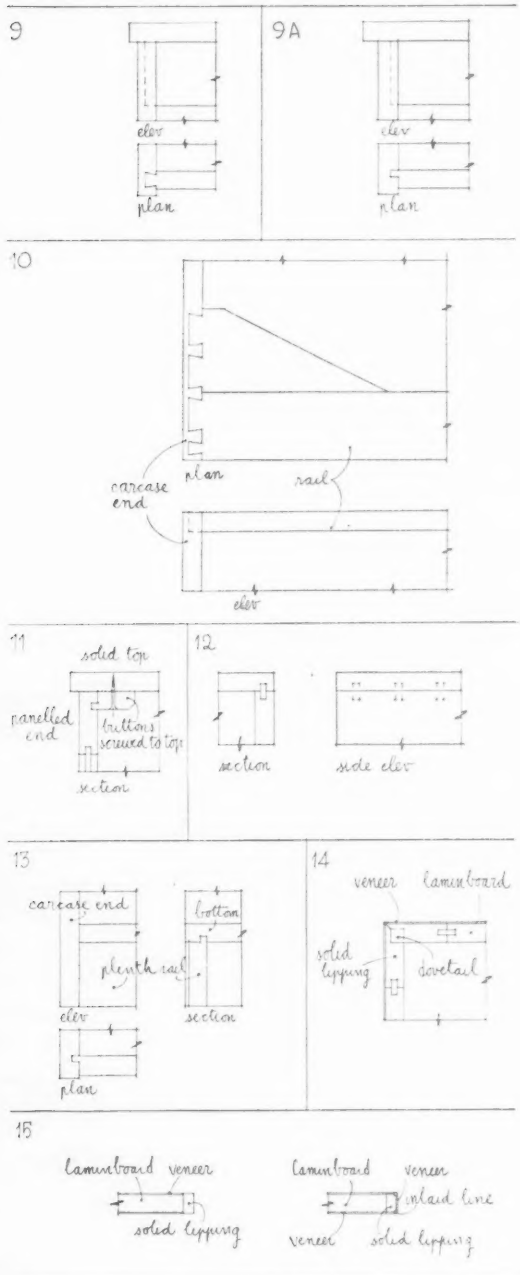
JOINTING AND FRAMING

In assembling carcases the traditional joint for top to side is the dovetail, either a "through" dovetail (Fig. 1), mitre secret (Fig. 2), or secret lapped (Fig. 3), and for bottom to side the lapped dovetail. The "through" dovetail, as it is visible on both sides, demands great care in cutting and fitting, and is, therefore, possibly the most expensive, although apparently the most straightforward. Of the secret dovetails the lap is cheaper than the mitre, but both appear to be essentially handwork requiring considerable skill and time; machine dovetailing exposes the dovetails on one face, and must usually be masked. It is obviously necessary in cheap work to use cheaper jointing, but the designer is handicapped by the lack of research on the relative strengths of alternative methods. Tongued mitring (Fig. 4) is sometimes used, and appears to form a strong joint, particularly if reinforced with angle blocks. Two factors prevent it being satisfactory from a production point of view: (*a*) the groove must be stopped short of the face edge of the carcase, so that the grooving cannot run straight through in machining, but must run out and be chopped back square by hand; (*b*) after gluing and assembling it is not possible to clamp from end to end of the carcase (as in dovetailed work, for example), and it is necessary to glue on angle blocks, clamp across the carcase angle and later clean off the blocks. Further, on

wide ends it is difficult to machine accurately both the mitre and the groove. There is no specialised machine in general use for this joint, which is usually machined on the dimension saw bench. These difficulties may be avoided by using a double rebated joint (Fig. 5) which, as it presents a neat appearance, may be exposed on the face edge. The end grain of the lap exposed to the side (as in the lap dovetail) may be radiused with advantage (Fig. 5a). It is usually considered that the short grain across the tongues is a serious weakness in this type of joint, and although this is possibly minimised by the large area of glueing surface, it is a joint which should perhaps be restricted to small carcases. Fig. 6 is a joint which avoids the assembling difficulties of the tongued mitre, and to a large extent the short-grain weaknesses of Fig. 5. The profile of the joint has an awkward appearance, and the designer will probably wish to disguise it on the front edges. Key or finger or German dovetail jointing (Fig. 7) appears to be cheap and strong, and is, of course, commonly used in the box-making trade. In practice it appears to be more difficult to obtain accuracy of fitting in this type of jointing than in the grooved and tongued types, and the alternating end grain is unsatisfactory in surfacing and polishing. Further economy may be possible by using projecting tops; continuous jointing is eliminated and the carcase ends connected by rails, either flat on section, as Fig. 8, or on edge, as Fig. 9. For large carcases (wardrobes, etc.) the increased rigidity obtained by the greater shoulder depth of Fig. 9 will be necessary; in smaller carcases it is probably desirable but not essential. (Again, as in all jointing problems, the designer is handicapped by lack of data.) In good traditional practice the rail is used flat and dovetailed into the carcase side, the rail being made out with triangular shaping to increase the width of jointing (Fig. 10). In cheaper work the housed dovetail may be simpler (Figs. 8 and 9); cheaper still, but apparently satisfactory in ordinary use, the rails may be tongued and grooved into the ends (Figs. 8a and 9a). In order to avoid the necessity of "flushing off" after assembly the rails should, if possible, be set back from the front edge of the carcase sides. Where the top and end are both solid or both panelled the top may be fixed by screwing up through the rails. If one is panelled and the other solid it will be necessary to allow for the differences in shrinkage either by slot screwing or by buttons (Fig. 11). Dowelling top and end (Fig. 12) with the top either flush or projecting is apparently used on the Continent. For small carcases it might be cheaper than the mitre-tongued or grooved joints, but is probably weaker laterally, and is feasible only in laminboard with the core running from front to back of carcase. In solid work it is quite unsuitable and would warp between dowels. Separate bases may be omitted and the carcase ends connected with a plinth rail set back from the face (Fig. 13). The cost of assembling and fixing the base will be largely saved.

The use of laminboard or block board appears to be





dictated by the fashion for veneered work rather than economies inherent in the material. The alternating grain structure and jointing cement does not cut so neatly and cleanly as solid timber, and the wear on cutting edges is rapider; in the best work the laminboard should perhaps be lipped with solid timber in which dovetails may be cut, veneering over laminboard and lipping (Fig. 14). As previously mentioned, laminboard will normally require veneering or other surface treatment such as opaque cellulose lacquer; compared with hardwood at similar price finished with wax polish, a laminboard job is likely to be more expensive by at least the cost of such surface treatment. Exposed edges are preferably lipped in the solid (essentially so across the core) to cover the veneer edge (Fig. 15).

DOOR CONSTRUCTION, HANGING AND FASTENING

In hanging doors the traditional and still apparently the only satisfactory method is to make the door slightly too large and shoot it to fit the opening. Much of the labour in hanging may be omitted by putting the door on the face either as in Fig. 16, freeing two edges, or as in Fig. 17, freeing all four edges (as the fitting beneath an overhanging top need not be close). In the latter type, unless the door edge is nearly flush with the carcase end it cannot be opened wider than 90 degrees without the hanging edge fouling, although this can be minimised by radiusing (Fig. 18), and hinge centres can be manipulated to give 180 degree opening. An alternative method to placing the door wholly on the face is to rebate the edges (Fig. 19) so that a tolerant fit is covered. It is necessary to use cranked hinges, which are more expensive than plain butts or face hinges, which are mostly, though perhaps not necessarily, unsightly. If butt hinges must be used the door may be rebated on three edges and the carcase rebated on the hanging edge; sufficient thickness must remain to take the length of adequate screws (Fig. 20). As far as doors themselves are concerned the usual type of framed and plywood panel construction is still perhaps the cheapest and the most satisfactory. Instead of grooving in the panel, and as a possibly cheaper method of forming a flush door than laminboard, the ply may be taken over the face of the framing and glued in a press, the edges lipped to cover the ply (Fig. 21). As the possibility of the plies lifting is remote the ply edge may be exposed, but the intermediate plies are not continuous (running out in jointing) and the appearance is often untidy in production, although selected ply may give good results for sample purposes. It is possibly cheaper to omit the lipping and lacquer the ply edge in opaque colour; on a door, however, a lacquered edge will hardly wear as well as the solid lipping. If the whole door is painted or cellulose lacquered, without lipping, the crack that will inevitably appear between the ply and the framing may be disguised by recessing or projecting the ply from the edge of the framing (Figs. 22 and 23) or by forming a

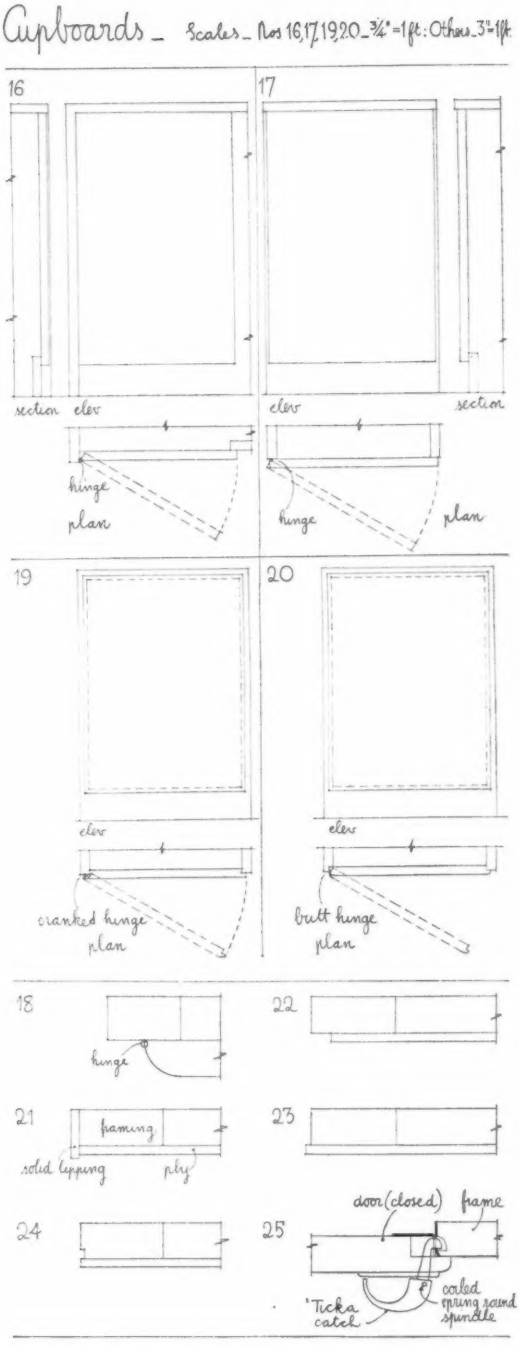
rebate in the framing (Fig. 24). Where the door is fitted into the carcase it will be found that an exposed ply edge will not open and close nicely and a solid slip is advisable on the closing edge.

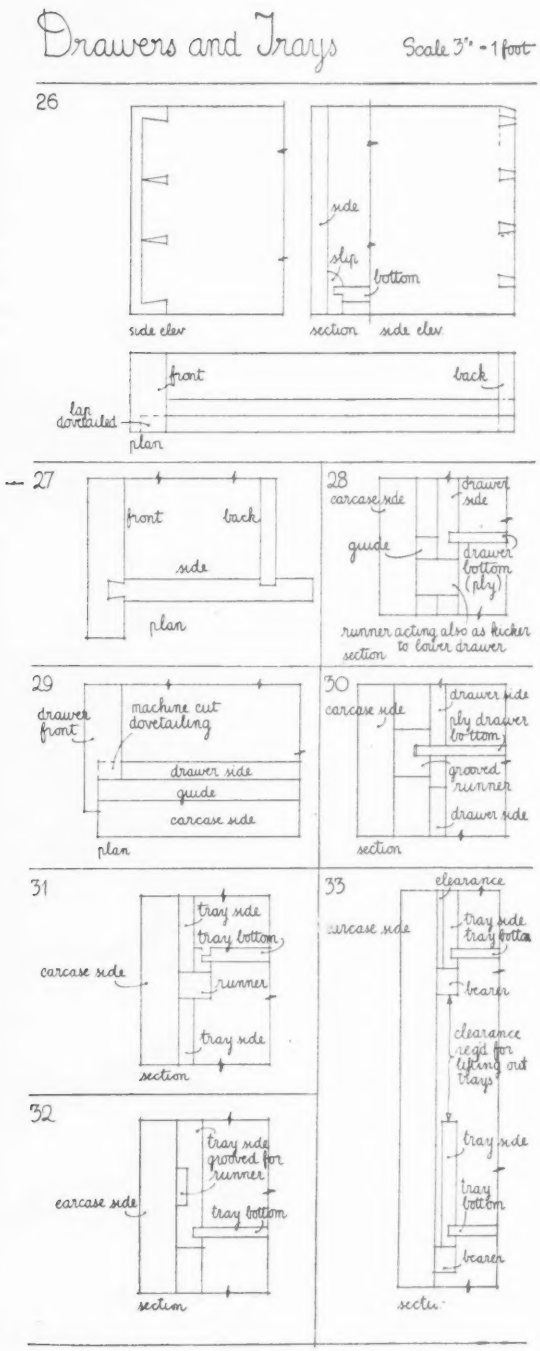
For door fastening the ball catch or French catch is not entirely satisfactory and cannot be fixed neatly on overlapping doors. Lightly constructed doors require positive fastening, if possible at top and bottom, to correct any tendency to cast; for this purpose turn-buckles seem to be required—though more expensive than the spring catches. If spring catches are used wooden strip handles are cheap and satisfactory. Turn-buckles, of course, are generally on metal T or knob handles, and cheap, well-designed stock designs are difficult to find. A proprietary catch, the "Ticka"* (Fig. 25), combines the advantages of positive fastening with spring latching and is a sound practical solution of the problem

DRAWER CONSTRUCTION

The problem of reducing the cost of drawers is similar to that of doors. The traditional well-made drawer (Fig. 26) has the sides dovetailed into the front and back, the bottom slipped; is made slightly too large and the sides and edges are planed to fit the carcase very exactly. With present technique it does not seem possible to make drawers that will fit nicely without adjustment, and even in the cheapest work allowance should be made for this in designing. Economies can be made in construction by omitting the dovetailing and dovetail-housing the sides into the front, which should overlap the carcase (Fig. 27). The drawer sides may be increased in thickness and a ply bottom grooved in, eliminating the slips. In fitting this type of drawer it is found that the overlapping front prevents the plane running straight through in fitting; it must be turned across the grain, near the front. To avoid this difficulty a slip may be inserted (Fig. 28) and adjusted to the drawer so that the drawer side need not be planed after assembly. When satisfactorily adjusted the slip is screwed to the carcase. A further and important advantage is that the area for fitting is considerably reduced in width. Alternatively the slip may be fixed to the drawer side and may be simpler to fit, although panelled carcase sides will involve the use of a further slip. This grooved dovetail method appears to be a reasonable and fairly satisfactory cheapening for small quantity production, but in large quantities and in factories where multi-spindle dovetailing machinery is available a more satisfactory method may be to rebate the drawer front and joint with machine cut dovetails (Fig. 29). As an alternative to carrying the drawer sides on a runner the ply bottom may be taken beneath the side and run in a grooved runner (Fig. 30), a method which does not permit of exact fitting as it is difficult to adjust the groove to variations in ply thick-

* Agents: The Willen Key Company, 201–205, Lever Street, City Road, London, E.C.1.



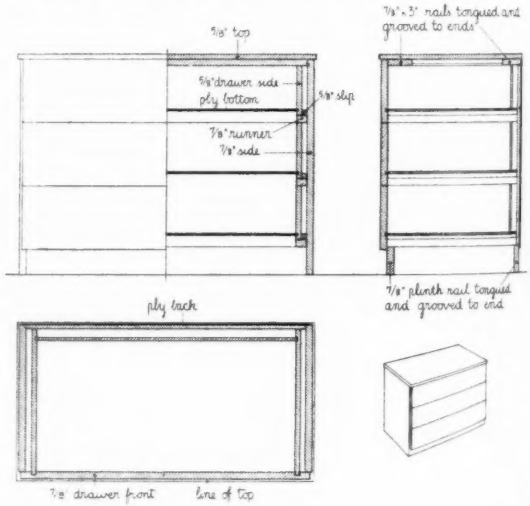


ness, and the ply itself is not a satisfactory material for planing down to fit the groove. It is perhaps more applicable to trays than to drawers. In cheap drawer work, as in cabinet making generally, a technique of designing, machining and assembling to carefully controlled tolerances, as in engineering practice, in order to eliminate fitting on individual pieces and provide complete interchangeability of parts, has yet to be evolved.

There is a tendency in modern design to substitute sets of trays within cupboards for the chest of drawers, although this tendency is not noticeable in the trade, where chests of drawers still retain their popularity. From the users' point of view, series of trays may be more convenient; in effect a large number of small trays—varied in size for particular requirements—is substituted for a small number of large drawers. To be justified economically the cost of trays must be sufficiently below the cost of drawers to allow for the extra cost of providing and hanging doors. Where trays are run in (Figs. 31 and 32) the problems of cost reduction will hardly differ from drawers, and the doors will be so much additional cost. Where trays are lifted rather than run (Fig. 33) no fitting will be required and the construction of the trays will perhaps be cheaper; but for ease in handling the trays must be restricted in size and the increase in number required to give storage space equivalent to normal drawers may offset the economies.

AN EXAMPLE

Circumstances and standards vary so widely that estimates of cost are necessarily controversial; but some indication of the cumulative economies in construction outlined in the foregoing notes may be of interest. Design A is a simple chest of three drawers constructed on sound traditional lines. The top and ends are secret mitre dovetailed, the bottom and ends are dovetailed.

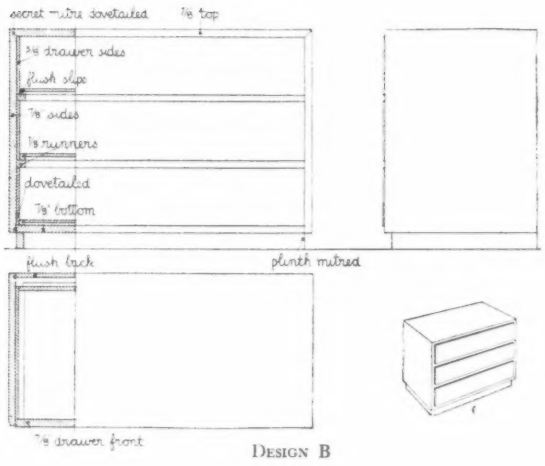


DESIGN A

the drawers are hand dovetailed. Design B gives the same accommodation but is designed for cheap production. It is assumed that both would be in selected oak finished wax polished, and would be made by skilled cabinet makers to produce well finished and well fitting work and would be machined in lots of one dozen. On this basis, with wages at 1s. 6d. an hour, the estimated costs would be:—

	A			B		
	£	s.	d.	£	s.	d.
Machine shop, labour	0	2	3	0	4	1½
Machine shop, overheads 100% ..	0	2	3	0	4	1½
Cabinet shop, labour	3	0	0	1	2	6
Cabinet shop, overheads 50% ..	1	10	0	0	11	3
Material, allow	1	15	0	1	6	0
	£6	9	6	£3	8	0

Overhead costs will differ considerably. The above percentages are assumed, but the ratio of machine shop overheads to cabinet shop overheads appears to be fairly constant. The estimated figures have been prepared by an independent estimator.



DESIGN B

Note on the Revision of Ordnance Survey Maps and Plans

All Ordnance Survey maps (with the exception of certain moorland areas which have been surveyed on the scale of 6 inches to 1 mile only) are derived from the 1/2500 survey. The 1/2500 survey of Great Britain was completed in 1893, and the more urban counties are now undergoing their third revision. The Ordnance Survey system is based on a system of checks at every step whereby either the work of one stage acts as a check on that in the previous stage, or the work of every individual is examined and checked independently by at least one other. This system of checks is a large element in the cost of the survey and the time required for its revision, and naturally it cannot be carried to extremes. It has been successful in its object of producing a thoroughly reliable map, although it must be admitted that, in spite of every care and precaution, a few errors have crept in and are still being detected.

Whenever an alleged "error" is brought to the notice of the Director-General, the Ordnance Survey practice is to investigate the matter with the aid of the field documents to ascertain whether the draughtsman has erred. If he has not, a field reviser is sent to the point indicated to check the field work and, if necessary, to correct it. If the alleged error is substantiated, a corrected plan is published as soon as possible, or, if the error is a very minor one, the printing plate and all available copies of the plan are corrected.

This correction of errors in the original survey and its revision is quite distinct from the normal revision. Up to 1914 all 1/2500 and 6 inch scale plans were revised periodically on a definite system in which counties were revised in rotation. During the Great War the strength of the Ordnance Survey was badly depleted, and the revision fell into arrears. After the war the system of county by county revision was continued, but in 1922 it was found necessary to change this system. From then onwards to the present day it has been the practice to revise only those areas in which there has been the greatest development since the last revision. Arrangements are now in hand for accelerating the rate of revision.

In order to obtain information as to whether any particular plan is the latest available, or has been superseded by a later edition, application should be made to the nearest Ordnance Survey agent, or direct to the Director-General at Southampton, who supplies all agents quarterly (and the principal agents every week) with a list of all maps and plans published during the period, showing the date of the ground revision of each.

The small scale maps of the Ordnance Survey, though based on the original 1/2500 survey, are revised and produced separately from, and at more frequent intervals than, the 1/2500 and 6 inch plans. The principal small scale maps are on scales of 1 inch, ½ inch, ¼ inch and 1/10 inch to 1 mile. They are published in several forms; coloured and uncoloured, with or without cloth backing, and either flat or folded in various ways.

Catalogues of small scale maps and large scale plans are published separately, and can be obtained either from the Director-General direct, or from all Ordnance Survey agents, price 1s. A complete list of agents is attached thereto.

The R.I.B.A. has been invited by the Ordnance Survey Committee to assist with the revision of Ordnance Survey maps. A note on this will be found on page 101).

A Standard of Values for Architecture To-day

BY FRANCIS LORNE, F.R.I.B.A.

PAPER READ BEFORE THE NORTHERN ARCHITECTURAL ASSOCIATION AT NEWCASTLE-ON-TYNE ON 13 FEBRUARY 1935

EVERY once in a while as the years go by it becomes necessary to reshuffle our standard of values. Conditions of living are always changing, so that the important thing of yesterday cuts no ice to-day, and that which was non-existent the other day is now the latest thing. Our life is in a continual state of flux, and therefore in continual need of restatement. We are interested primarily, of course, as architects in the restatement of things architectural, but, as architecture is so closely related to living, a statement of architecture is practically a statement of our country, and as foreign relationships extend and we become more international in our way of living, it becomes, with the exception perhaps only of climate, a statement of human-kind. The best standard of values or the best code of manners of any time become the best manner of expressing the method, way, style and habit of the age. We need, and have needed for some time, something of a standard of essential values to strike at, a goal, as it were, for our time, but the general public must have it before we shall get it for architecture. We can only advance in architecture as far as we can persuade the public to advance with us. It remains with us, therefore, to habituate them to looking through new eyes. I shall tell you what I think will be a good standard of values, after which we can discuss it and between us probably arrive somewhere in our thinking that will lead us to better mannered action for our time. I should say the essential things consist of—

1. Being ourselves, and therefore being original.
2. Being simple, and therefore poised and quiet.
3. Being chic, and therefore distinguished.
4. Being co-operative, and therefore serviceable.

It is not very difficult for us to realise that to be ourselves is to be original. No human being is the same as another, nor any animal, flower, tree or piece of natural scenery. All of these preserve their individuality and original qualities save man, who is prone to the fatal diseases of snobbery and plagiarism, and nearly all of us suffer from these maladies in a greater or lesser degree. We see some individual or race of individuals gain ascendancy through original behaviour and our snobbish instincts lead us to copy. We sink thereby as human beings into the morass of mediocrity. Just think of the snobbery and plagiarism of clothes, buildings and furniture. Watch women devour the fashion magazines for the latest thing from Paris, the dark, the fair, the fat, the thin, the tall and the short, all aping the one thing which really fits only one, with the result that most of them are makeshifts, unnaturally trying to be someone else and becoming mediocre thereby. Watch a man increase his wealth and surround himself with the essentials and trappings of the man-about-town or the country squire, pathetically pretending that he has enjoyed them all his life. He becomes a bulwark of old traditions, old houses, and old furniture. Watch the architect with his adaptations of Classic, Gothic, Elizabethan and Georgian, copying the planning, treatment and detail of another age and manner of living, pathetically trying to live in two ages at the one time.

Look at our designs which one sees in the magazines. The Renaissance plan, the Renaissance form of windows, doors and fenestration, but instead of Renaissance detail there is a triangulated form of detail which is called modern. They are not in any sense really modern buildings, they are only Renaissance buildings with modern dressings; grandmothers in modern gowns. Architecture has degenerated into the habit of applying ornament to things. It is not any more, unless in very isolated cases, the art and science of building. If you doubt this, let us for a moment invade an architect's office and overhear a conversation on any job, something like this:—

"What about getting out a really attractive composition this time; here's a chance, an island site. What d'you think, shall we have a symmetrical composition or an asymmetrical one? Anyhow, let's build up an interesting mass which has a good sculpturesque quality about it. I think it would help to lengthen these wings a bit. Suppose we raise the height of that storey, it seems too low. D'you think we should have a vertical treatment or a horizontal one? Or why not combine them—happy thought, horizontal there and just a little vertical here? What about style? Shall we make it just faintly Georgian or shall we go all out for modern? What about roofs? Oh, you can't put sloping roofs on a modern design. Well then, let's compromise, what about a flat in the centre and butt the sloping roofs of the wings against the central mass. Don't you think this central mass is much too plain? Let's put in some breaks and change the colour and the texture a bit. Let's put in a

good strong set-back here. It will mean that we will have to put in some extra steel to carry it, but what's steel for, anyway. What about putting in a couple of balconies, one here and one there?—break it up, give it interest. What about this big room in here? We've got to get around it on this side, you know. We forgot all about that. Oh well, never mind for the moment, the boys will work it out on the plan somehow, and we'll get the builder to do one of his stunts and carry it."

How typical. Applied ornament, sculpturesque grouping—the most sinister influence and major curse of architecture to-day, and 99 per cent. of the buildings in this country are designed this way. Perhaps it is just as well the man who pays doesn't know it. This is not architecture. It is not building. It is just playing with toy bricks. It is just being little boys again. Meanwhile, what becomes of the planning? What becomes of the reasons for the building existing at all, namely, the client's requirements and its usableness as a building for him and his purposes? What about its economic being, that it should be financially worth while to build it, its being itself as a building, its being original? Suppose instead of all this we tried for once to make a school look like a school instead of a study in composition of a Georgian country house or a T.B. Hospital in Switzerland. Suppose we make a multiple block of flats look like what it is, rather than a Florentine palace or a hotel in the South of France; a library that looks like a library rather than the Pantheon at Rome. Let us create a design out of its fundamental requirements. We have had enough of first thinking, of sculpturesque composition, applied detail and copying foreign designs, and second of torturing the conditions and requirements of the client into what's left.

The first consideration of a building is the use to which it is to be put; second, the form, the rooms, their size and the combination of them will demand; third, the best and most usable materials with which to build it; fourth, the most efficient building process for putting it together; fifth, whether in this form it is economic and worth while to build it at all; and sixth, its design, and by its design I mean treating this set of conditions in such a way that they will be true to themselves and have a distinction and personality of their own. Naturally, it depends on the mental grasp of the man or men who do it how good the result will be. It depends what the gods have given them in capacity to create, but only in this way will a building be itself, only this way will it be original, and only this way a modern work of art.

Let us consider also our furniture. We take a Queen Anne chair, an Adams table, a Chippendale desk, an Empire wardrobe, and apply modern ornament to them and call them designs in modern furniture. The applied ornament craze again. It hasn't occurred to the designers of buildings that for to-day, if we are to be true to ourselves, we must design for use in modern living. A Queen Anne chair was all right in Queen Anne's day, but our age is not one when people sit bolt upright in a chair. This is an age when one lounges in a chair. Try if you can to beat the modern motor-car seat for modern sitting. Watch the antics of the average person in a old straight chair. See how he twists and turns. Why? He is just trying to find a comfortable position in a chair which for to-day provides no comfortable position. Look at our so-called modern writing-desks—pigeon-holes, small doors, little compartments, flaps which fall down for writing and which overbalance the whole fitting when you lean on them, or wobble as badly as a train when you write on them; no space for card indexes or filing systems, not even enough space for one's knees and, worst of all, not enough space on which to write.

I don't know whether you suffer as much as I do when dining at friends' tables when I cannot cross my legs or when I get them jammed or drive a sharp corner of the under-carriage into my knee, or when I sit or lay my hands on some cold unsympathetic material that makes me gulp hot soup to keep from freezing. Yet all these are dressed up in modern ornament and called modern design. Observe the vast number of wardrobes one sees in walnut with vertical grain, horizontal grain, or combinations of both, bands of stainless steel and triangulated ornament, everything, in fact, except sufficient and efficient space in which to put one's clothes. Art for art's sake, but certainly not art for storing clothes' sake. In any event anyone worthy of the name of a modern wouldn't use them; he would have wardrobes with a properly designed space for everything built into the walls of his house. If you want to see the most amazing collection of grandmotherly fittings parading around in modern garb, visit the Royal Academy Exhibition of British Art in Industry. You will see a lot of modern ornament plastered on industry, but the art and the industry have not fused in design any more than before, they are still separate, they are neither in tune with themselves nor with life. We have for too long been pseudo Greeks, Romans, Goths, Elizabethans, Jacobeans, Tudors, Georgians, and more lately modern Dutch, Swedes and Germans. What a slough of snobbery and plagiarism we live in. You would not walk down the street except to a fancy-dress ball in an Elizabethan gown, and yet you will live in an adaptation of an Elizabethan house with reproductions of Queen Anne or Empire furniture. Why? Try and find a reason which you can really look at down a logical nose. You may say that the old stuff is good, as so many do, and that there is nothing new under the sun. I don't like to disappoint you. The Greeks did not run around in motor-cars; the Romans did not call their friends to cocktail parties over the telephone or the Elizabethans fly to Australia in a week-end, and you must be very out of touch with modern living if you do not realise that there are many ways in our modern life quite as original as these.

You may say also that I am indicating what is bad and indicating very little what to do to make it better.

Perhaps, but only your thoughts and your ways finding expressions in things can be really *you*, and if I can change your thinking you will do the rest. You see what the motor-car manufacturer is doing with his cars in modern design. You see what the aeroplane designer is doing; you see what the streamline train designer is doing; what the Swedes are doing in glass, what the Paris coutouriers are doing for women and London tailors for men; what a few architects are doing to work out buildings for modern living as the others are doing for transportation and clothes. You see also that these men are building their furniture into the structure as an integral part of it, and not just buying it from an antique store. You see that they are solving the demands of a new generation entirely on its own merits, that they are making things over from their very foundations for a new way of living, not simply resurfacing the old; they are, in other words, being themselves, and therefore being original. They are being twentieth-century human beings wherever they are. They are trying to root plagiarism out of their lives so what I say is: go and do likewise—and don't forget in going that anybody can copy the other fellow, but it takes years to be yourself.

Let us consider now the second quality we want, that of being simple and therefore poised and quiet. I mean the simplicity which comes by directness in our ways and use of things, the having knowledge of and intimacy with essentials. We have lost much of our appreciation of essentials through so many years of not being ourselves. Nothing blunts the essentials like insincerity. Our life every once in a while through insincerity becomes too complicated, insincerity leads to inferiority, and the inferiority complex develops a million difficulties for us. We see it working in architecture and design in so many ways. There is far too great a tendency to complicate and disturb direct planning, to disturb simple planes by breaking them up unnecessarily, to complicate masses and groups to a point of absurdity, to complicate ornament until there is hardly a place on which to rest one's eyes, and particularly to add features and notions for which there is no use at all, either æsthetically or functionally. Bell and clock towers—what a farce in days when everyone carries a watch. There is an insane desire in most designers to-day which can only arise from an intense feeling of inferiority to make themselves felt, to make a noise, to be obvious, to develop almost a yellow Press manner of exhibitionism and stunting; almost the attitude of "I'll tell the world," with the result that our buildings, our furniture, our exhibitions shout like loud speakers or startle like neon signs, everybody putting on all he knows till one gets the quality of a Woolworth store window. Our furniture is the same—complicated draw-pulls that were designed as spots of ornament rather than to pull a draw, complicated door handles and hinges, complicated doors and drawers, complicated everything, so that we almost need a pamphlet of instructions on how to use them. Our many exhibitions suffer in the same way, too many exhibits, too much glass with too much cutting on it, too many fabrics with too much design on them, too much furniture with too much detail, too many small rooms with items enough to fill rooms four times their size. Everybody showing everything he has got and all he knows. A riot, in other words. It's like Stephen Leacock's hero who rushes out of the house and rides off madly in all directions. It's hard to get anywhere this way. Have we forgotten entirely that one of the fundamentals of good art is simplicity? Have we forgotten that to work out the bare essentials and then simplify even these we should have a greater art? Art consists more in what we can eliminate than in what we put on, and yet putting things on has grown to the proportions of a major disease in this country. Is it impossible for us to get any lightness and gaiety, restraint and poise into what we do? To have this in art, however, one must assume the person who has them in himself, the person who is sure of himself, the person who is really living in his own generation, the person who *is* himself. The "get rich quick Wallingford" instinct, the "be seen," "be heard," and "be talked about" instincts are ruining our art. Great art assumes great people; little noisy, fussy people cannot produce great art.

We used to have an idea in England that the really well-dressed man was not obvious, that to be obvious was rather bad form. One would hardly believe this from architectural and furniture design to-day. There is far too much exhibitionism and stunting. Don't let's mix this up with the real thing. There is the surprise that comes from an entirely new invention such as the gramophone, the radio or the aeroplane; also the surprise that comes through the development of the multiple building holding thousands of people in a manner and with conveniences undreamed of before, but this is not stunting, this is mental expansion, this is new life. These have something to say, they have something by which human beings grow into bigger human beings; what I refer to is the man with nothing to say saying it over again and louder than ever before. This can never be anything else than sand in the gears or water in the carburettor. I heard recently of a lady who took a modern centrally-heated flat and came to the conclusion that it was too simple and, as she said, not cosy enough. She had a painted wood imitation brick mantel made, she put inside it an electric imitation coal fire, she had a set of imitation brush, poker and tongs by the fireside, an imitation cat, and two large seats, one on each side of the fire with high backs and side cheeks made long ago to break draughts. She said she needed them to make the flat cosy. She did not realise that she just made it frowsy. She did not realise that it was not the modern flat that was wrong but her mental condition. She was unable to understand simple living. She had to be surrounded with Christmas tree effects. This is a good test: if you need these things you are fussily romantic, you are not able to stand on your own two feet, you have not been able to debunk your life. Being simple, restrained, poised,

quiet and modern is not so much a way of doing things as it is a state of mind. It is perhaps hard to get this state of mind, but if we will turn our face instead of our back to our generation we will find in it a new freedom. Strangely enough it is not more standardised, nothing could be more standardised than the orders and Renaissance plans, but we were bound by them for so long we have become numb to their restraining influences, we fail to realise what artificial, complicated human beings they made of us. We feel lost without them, we feel the same way as the romantic woman feels in the utterly simple flat. But if we will make architectural expression fit our lives instead of trying to fit our lives to it, in other words "Art for man" instead of "Art for Art's sake," we shall gain a greater freedom and have a chance to be simple, poised and quiet.

Let us now consider our third essential, that of being chic and therefore distinguished. Chic is easy, natural elegance, good style, the stamp of superiority and distinction. We all realise that in producing an architectural work of art it is not enough to satisfy the functions as it is not enough to produce a design with no regard to the functions. Let's look at it this way—we have suffered too long from the functional products of manufacturers which are unattractive, and too much from the unfunctional designs of artists; what we badly need is a fusion of the two. The science and the art must fuse before we can get anything worth while. We have suffered too much also from the sacred and profane attitude of artists that certain things in life are important and other things don't matter. All things in life are important, the only difference being that some things are more important than others. The unfunctional qualities of some of our products and the overdone artistic treatment of others separates them from chic and distinction as widely as races and creeds separate human beings. Chic is being oneself, being original, being simple, poised and quiet. It is the combination of the conscious and the subconscious in the artist. It is perhaps the only thing in life that can't be taught. It is a quality that comes with maturity, it scarcely ever exists in youth. Just as young women are practically never beautiful and chic, they are only pretty and vivacious, they have not had the time to develop the character which chic demands, so chic in design comes to the man after years, when he has passed the age of prettiness and vivaciously putting on all he knows, when he has become restrained and poised, in other words when he is mature. It is the ultimate of one's time. It is the quality so outstanding in Schiaparelli's modern dress. Paris touches it frequently in clothes for women, London in clothes for men, Berlin did it for a few years in architecture, Sweden does it in glass and sculpture, and the Americans do it in advertising. It happens most frequently, strangely enough, when we come across the enigma of the artist who is also an executive, the one alone does not seem to be enough, perhaps because it demands a person of so many parts in one; conflict seems to be necessary, principally the conflict between function and art expression; all function is mostly dull and all art mostly silly. Art work in this country belongs to the latter of these and takes the form of not being able to keep hands off things; fingers literally itch to put things on, and this kills us. Look at the amazing effects obtained by the simplest of elements arranged in the simplest of terms in some of the foreign work. It could not possibly say more than it does, and yet it has arrived at that stage of completion when one could not take a line away or add one without spoiling it.

I remember once talking to a manager of a store in this country about the smartness of French dresses. I asked him why he did not show them in larger numbers. He said they would not sell except to a limited clientele, that they had to be made over to suit English taste, they were too simple. Women felt uncomfortable in them, things had to be put on, they had to be fussed up. I have been told by an American that the same exists there. He showed me illustrations of the "made overs." I said that in the process they had lost all their chic and distinction, he said, "Precisely, but they sell, and we are in business to make sales." I wish this were confined to clothes for women, but it runs through architecture, our furniture, our twisting streets, our landscape gardening, and all our Art expression. We lack the grand manner to-day either because we have never had it or because we have, in our strange way, thought it pretentious, perhaps we are too self-conscious. We lack a civic sense because we have always treated a city as a place to make money in and then get out of it into the country as quickly as possible. Yet notwithstanding all this the London man is perhaps the smartest dressed man in the world. It is coming, however, in other ways. Some of our night-clubs are smarter than they have been, with more smartly-dressed men and women. We have got it in many of our modern shops, in rugs and fabrics, in some furniture and buildings, we have got it in some advertising too, it is by no means entirely lacking, and who knows but some day this smartness, chic and distinction will penetrate more of our streets, our architecture and the homes of the people.

We have said a good deal about the art of architecture, let us speak now in our last essential about the practice of it. We want to be more co-operative and therefore more serviceable to society. Art is useless unless it can be translated into terms of pleasurable use. The whole point of our discussion so far has been to arrive at standards which will help us to raise the art of architecture nearer to perfection for our time. Our idea now is how we can distribute these benefits to everybody. Let us consider for a moment some of the vital changes in the attitude of our countrymen towards society in general, which is bound to have an effect upon the practice of our architecture.

The Greek and Roman civilisations were civilisations of only a limited number of freemen who lived on a great mass of slaves. It is true that a number of these, like Phideas and others, worked through to freedom, but the

great mass remained in a category very close to animals. It was a limited civilisation in that it existed only for a limited number of human beings. Our Norman forefathers built up a civilisation wherein the monarch allowed certain lords and barons to have so many head of serfs as they had so many head of cattle. Again, it was only a civilisation of the few living upon the many. Later on our industrial forefathers developed a civilisation on the factories, the artisans and the workers. The condition of these workers was little better than it had been under the Greek, Roman and Norman civilisations. It is true they were free men, but what did their freedom consist of? It consisted of taking what their industrial overlords offered them, which was the lowest terms upon which they could exist, or walking out to another district of the country where a similar set of conditions existed and for whose different form of manufacture they had no aptitude, or lastly facing poverty and starvation, or, perhaps, if they were lucky going abroad to one of the colonies. They were therefore quite frankly slaves as the others had been before them. The result was the great mass was pirated upon, their wages were too low for decent living, their children poorly educated, poorly fed, poorly clothed and poorly housed, were driven into the factories or down the mines to supplement the family income. They were stunted in body and in mind; they gave birth to more stunted children and so the process went on. They spread disease which did not stay with themselves but attacked the whole body politic. Slums developed because their economic position could support nothing else. All of this became intensified during the time of the world war when no further building was possible until the physical, mental, moral and political problem of these people became so acute that it forced itself into the limelight and stared in our faces as the major problem of our generation, threatening to upset our apple-cart and pull down our whole national heritage around our ears. Our civilisation and our business, until very recently, had been a means of money-making to provide a few with the amenities of life. It had not been a means of making life in general more beautiful. It had not been a means of raising the standard of the living of the whole of England.

During this time how many architects were interested in making a more beautiful Newcastle or London, a better layout of streets, better buildings and better living conditions for everybody? Had we not all been mostly raising isolated monuments to satisfy our architectural vanity, attending our institutes to discuss ancient monuments and better professional standing for ourselves, trying to lower our golf score, and making ourselves as comfortable as we could. Meanwhile the real problem of building up the country architecturally and designing its living had been left to take care of itself. Selfishness of this kind can only lead to ugliness, no matter how you take it. Meanwhile we had not been too proud to take our fees for monuments out of the wealth which the factories and the workers created, but we were much too proud to design these factories wherein the wealth was created and the homes of the workers who created it. Really as a profession we should be ashamed. Fortunately, parallel with the growing intensity of the problem of national rebuilding had been steadily growing the realisation of the need of national planning in every aspect of our life. It has fortunately dawned on a few architects throughout the world that architecture is an immeasurably greater thing than pretty perspectives and ornaments on monuments. There had been growing, too, the realisation of the need of a far more embracing democracy, not a pseudo democracy of one group or the other but one which has as its chief interest the benefit of the whole, so we are now growing to accept voluntarily the ideal of a greater distribution of the wealth of the country. We are becoming more civilised to the extent that we are now realising that civilisation means something wider than ever before, it means extending the amenities of life to everybody. In other words, we are growing to be more co-operative and through this we realise that not for much longer can human kind be divided into two classes, one which works and the other which plays upon it. It is possible that gone for ever are the days of unlimited piracy and selfish grasping in business, and we can see at last a faint ray of the beginnings of co-operative working for the service of the whole of society. It is a much greater and deeper understanding of civilisation, much more liberal and humane, much more intelligent and with the removal which must come with it of squalor, dire poverty, disease and perverted living, the lives of all will be much more comfortable and pleasant. Perhaps nothing has contributed so much to make this possible as the development of the machine and of mass production, the product of it.

Strangely enough, the development of the machine will bring with it for us a very different form of client. Heretofore we have dealt with the individual who has been our mainstay for as many years as architecture has existed, but it is probable that very soon we shall change from the consideration of the individual client to the consideration of the whole of society. Machines have grown from the means which provided man with motive power for transportation, to striking his stamps and his coinage, to making shoes and clothes for him, and turning out a new type of furniture. As they grew in intricacy and capacity their market had to be extended to keep them busy, and they found that it paid to reduce very materially the cost of the article so as to broaden the market. This meant that many more individuals could enjoy what only the few enjoyed before. This gave birth to the Woolworth Store and many others like it. We are only at the beginnings of this development, but I shall be very surprised if most of us don't see it well advanced in our day. We have seen the astonishing growth and quality and conveniences in the standardisation of the motor-car and how every year as the motor shows come round we are amazed at the rapidity of this growth. The Rolls-Royce and the Ford of 1915 and

those of 1935 are very different things, and to-day these two cars represent only a difference in price level and a difference in standard. They each carry much the same benefits to man. Some of us have seen the standardised buildings at extremes of price range in Germany, Holland, Austria and America, whereby man can have many more conveniences for less money than on the old entirely individualistic basis. At the present time we pick among the standards of cars until we get what we want. Some day soon we shall pick among the standards of buildings in much the same way. Some architects are so afraid this will cut into their profession. It will, but only into its narrowness, to open it up to dimensions and possibilities far beyond their wildest dreams. Just as it did over thirty years ago to the hesitant motor-car manufacturers, and through this means the amenities and conveniences of all kinds of buildings will be able to reach the smallest pocket as well as the largest. The only thing we have to concern ourselves with is the raising of the standard of what is produced, but this standard raising will be quite automatic, just as it has been with cars. The law of supply and demand and the competition between one man and another or one group of men and another will take care of that. Don't be afraid—it does not spoil your joy at seeing a beautiful Rolls-Royce car pass by to know that another is coming in a minute. It does not spoil a chic thing to have a lot of it. It has not spoiled Bach to have him reproduced on the gramophone. We have always had plenty of standardisation, but, unfortunately, the wrong kind. What about the rows of workers' houses and the rows of small suburban villas of Victorian times, and what about the ribbon developments of jerry-built houses along the great roads of our own day? Why are these so bad? Largely because architects took no interest in them, and this individualistic superiority prevented them from being properly designed. They were like the original "T" Model Ford, utilitarian and ugly. But look at the Ford car now. Wherein does the difference lie? Mostly in this, that someone has set to work on the design. The same will naturally happen to our housing, but we must be clear about this—the design must be fundamental, it must be a mastery of essentials, a mastery of materials, a mastery of the building method, a mastery of processing and mass production, a mastery of improved amenities, and not just a plastering on of ornament as we have done in the past, until we were dropped by the wayside as uneconomic. When we have done this—or, at least, have gone some way in the doing of it—everyone will be better housed, better washed, better heated; the health of everyone will be better and the whole national standard raised. Do not let us be afraid to carry standardisation to the limit. Only in this way can the national living standard be improved, and only this way the standard of building improved. Human beings will not be any more standardised this way than they are now, and they are certainly not standardised now by driving in a standard car, wearing a standard pair of shoes or paying a standard coin over the counter to buy a standard stamp to post a letter to a friend.

Those of us who have grown up in architecture in this country, who have had also the advantages of working abroad, and who have kept our eyes and our minds open for ideas and influences that come in from every quarter of the world to-day, artistic, business and social, realise that we must work henceforth more for the service of society, and not so much for ourselves and our individual client. It is not enough any more that we have a few distinguished buildings while the others which line our streets and make up our cities are so depressing. It is not enough that we have a few people with charm, money and taste and the great mass living on a level that is subnormal. We must grow to realise that whatever society needs and demands for the expression of any part of her life, it is our job to fulfil it; and whatever that thing is, no matter how simple, to treat it in the best, most efficient, most economical and attractive manner. We must realise that all requirements of society are important, for they have a bearing in some way upon her life and happiness. We have thought too long of the individual client, the individual job, our lofty professional standing, the returns to be made out of this and that and the professional and public honours that may come our way. We have thought very little of our real position in society, for we have not made a habit of realism, namely, that we are possessors of a certain knowledge of architecture and building through which we make a living by others buying our experience from us, much as we buy what we want from the rest of society, whether it be a suit of clothes or a seat on the Blue Train. Whatever it is we want, we demand it and expect to get it, because we pay for it. We don't take just what is handed to us, we demand what we want. Some day this will get into the heads of architects that society demands of us what we demand of it. When we get this straight we shall be healthier as a profession, and society, no doubt, will get greater co-operation and service from us.

The practice of our profession is beset with stupendous difficulties. It is perhaps the most difficult and exacting profession in the world. Our responsibilities are enormous, they are toward art and toward functional things, too—design, plan, conveniences, money and time, not to speak of the ever-present public authority. But over and above all of them our real job is to steamroll ugliness, to search for order and beauty in every department of life, and having found them, to spread them as far over and as far into society, to re-make society, in fact, as much as it is possible for us to do in our day.

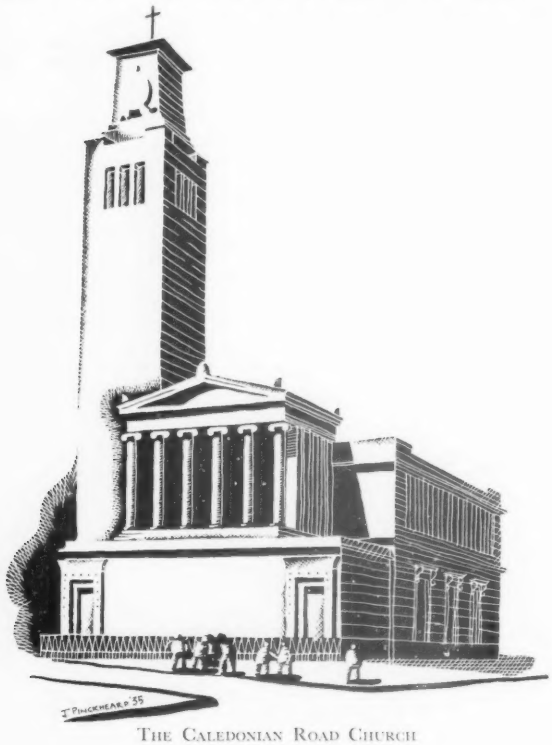
The Conference Visits and Tours

VISIT A
TOUR ROUND GLASGOW

The plan of Glasgow is a little difficult for the ordinary visitor to grasp. True it has a most ample backbone in the River Clyde—but this modestly hides itself behind a veil of unattractive wharfside streets and commercial warehouses. In the city itself the visitor is apt to lose his sense of direction in the maze of rectangular street crossings till he learns (as he hardly does within the duration of a two to three day conference) the names of a few leading thoroughfares, and more especially a few tramway routes, and their distinguishing colours.

Nor is a tour—in which some sixty people are packed into a couple of motor-coaches and carted they know not whither—the best means of becoming acquainted with one's Glasgow—it is merely the only available means in the time.

At three points in course of the three hours' tour, however, we were able to get our heads above the surface of bewilderment; first, when we halted for a few minutes in Park Terrace by the Lord Roberts statue; second, when we tried to cross the Clyde by the Govan Ferry, but failed owing to sheer congestion of traffic; and third, at our halt by the Cathedral and Necropolis. From the commanding elevation of Park Terrace we could enjoy the panorama of the city and river spread out at our feet—University, Art Gallery, Kelvin Hall, and the masts of the ships in Queen's and Prince's Docks—only the indifferent visibility of that afternoon slightly marring the view. At Govan Ferry, despite the disappointment of being balked of a run through the environs on the south side of the river, we had the satisfaction of experiencing contact with the busy wharfside life of the port. Finally at the Cathedral we found ourselves in a less congested and more leisured older Glasgow, "Provand's Lordship," and the grand old Cathedral backed by the hill which climbs upwards and throws into the skyline its monumental columns and obelisks with a bold abruptness almost Athenian—a Necropolis, but with the mien of an Acropolis.



THE CALEDONIAN ROAD CHURCH

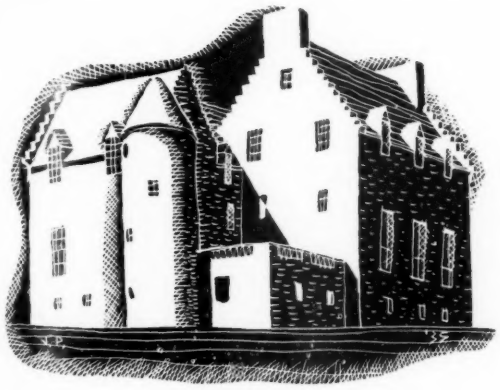
I was charmed to revisit this haunt of my youth, and touched to find the old Cathedral so little changed. Still do the vergers and attendants wear their hats within the building, still are the windows filled by the most blatant stained glass in Christendom, and still there remain the shiny pews of early Victorian Gothic. But the fabric is as fascinating as ever. What an admirable Crypt—what daring and successful vaulting motives! It is surely no slight to the many fine buildings of this modern city to say that the Cathedral is still the best bit of architecture in Glasgow.

Next to getting a *coup d'œil* of Glasgow perhaps the chief interest of the drive lay in the opportunity to see something of the work of the two men whose names, above those of all others in local architecture are of world-wide importance, "Greek" Thomson and C. R. Mackintosh, those two pioneers of the "Modern Movement," by the side of whose names there is hardly more than one British name to be set, that of Philip Webb. We saw Thomson's St. Vincent Street Church and its adjoining range of residential buildings, the tower of the former seeming to belong, in the general composition, rather to the latter than to the church. Again we were shown the Caledonian Road Church by the same architect, as well as the church of Queen's Park St. George—the only Thomson building of which we inspected the interior. This is chiefly remarkable for the striking and consistent colour-scheme carried out in collaboration with Daniel Cottier, and for the curious and equally striking platform (high and without guard rails) and pulpit arrangements. A lady from the South remarked, "How very strange, how unecclesiastical, but this is the first time I have ever been inside a Conventicle"! No time then to instruct her, we had to hurry back to our motor-coaches under Mr. Lochhead's capable but ruthless captainship.

Poor Charles Mackintosh! The Art School is almost the sole example of his amazing genius that we could be shown. But there it stands, eloquent with the message that was to ring through the continent of Europe from Holland to Vienna. One can see from it what he owed to his predecessor Thomson, and what our younger spirits of to-day owe to him, at long range in space if not in time.

And so we drew up at Renfrew Street "at the back of" five o'clock (as local parlance has it) in good time to prepare for the evening Civic Reception.

JOHN BEGG [*F.*]



FORMAKIN

VISIT B
FORMAKIN, BISHOPTON, RESIDENCE OF JOHN HOLMS, ESQ.

It is not clear, even at this late date, if the visit to Formakin was conducted.

There was no conductor, architectural or otherwise, on the first bus—the driver took control and the second bus followed.

After a pleasant run from Glasgow through Paisley to somewhere near Houston, we stopped at the entrance to a house which was not Formakin. The explanation of the mistake is worth recounting. The driver had been instructed to take us to a house near Bishopton which had recently been burgled—such a description applied to the house at which we arrived, but also to Formakin, at which we stopped shortly afterwards—possibly the same thieves but not the same house. Formakin, 1912–14, has been described as the peak of the late Sir Robert Lorimer's development in the expression of the national style of architecture. Here is no slavish reproduction of period and ornament, but a sane and masterly expression of modern Scottish architecture.

Mr. John Holms met the party in the garden, after which we wandered individually through the most exquisite surroundings.

All the quiet restfulness that a beautiful garden well laid out with tasteful but unobstrusive ornaments can give was ours for one brief half-hour.

We entered the house and partook of Mr. Holms's hospitality in the Great Chamber, a lofty and impressive room containing some exquisite furniture, not the least pleasing being a round table and William and Mary chairs with excellent tapestried backs.

This room was primarily designed to house a series of French fifteenth-century tapestries known as "The Conquest of India," one of which tapestries has been rudely torn from the wall by thieves.

I seemed to recollect having seen, on a previous visit about 1923, a fireplace which bore the inscription, "God help the rich, the poor can beg," and unsuccessfully spent some time trying to find it—perhaps it is not there.

The sound of applause from the Great Chamber caused me to retrace my steps, and I was in time to hear Mr. Holms reply briefly to a short speech made by Sir Giles Gilbert Scott.

Mr. Holms expressed the thought that architects are insufficiently recompensed for their services and advice, a belief strengthened, he said, by the amount of advice he had received from eminent architects—all for the price of a whisky and a cup of tea—a very modest expression of a most free and unstinted hospitality. Advice, no doubt, was given as to what ought to be done to complete the house, and certainly one is tempted to think of Miss Havisham's surroundings in *Great Expectations*. Everything has been left just as it must have been when building operations ceased. Rough unhewn pieces of sandstone lie in the yard beside the silent cranes. House leeks grow upon the machinery of the cranes, and throughout the workmen's tools seem to have been laid down to remain untouched—perhaps a memorial to a certain hour of a certain day when the work ceased.

Mr. Holms in person is more than sufficient to dispel the illusions of Miss Havisham, but visitors might well be excused the expression of a thought which was with all of us—what a pity the work could not be finished internally as was originally intended. The complete scheme comprising the entrance lodge and gates, the house, garden, bothy, stables, mill and summer-house is a most lasting memorial to the collaboration of a talented architect and an equally talented client and all that is best in Scots domestic architecture.

The weather was excellent throughout the afternoon and a different route was taken for the return journey, permitting visitors to obtain some idea of the extent of the shipbuilding yards on the Clyde. JOHN WATSON, JUNR. [A.]

VISIT C
TO PAISLEY ABBEY

Those visiting Glasgow—or perhaps even Scotland itself—for the first time must have been somewhat disillusioned by their arrival on Wednesday evening. As an introduction to the romantic beauties of Scotland, the smoky horrors of Motherwell and the streets of Glasgow on a wet night scarcely make for enthusiasm. But for those who joined the Paisley visit on Thursday afternoon a real Scottish welcome was waiting.

We had scarcely rolled away from the dour grey and black streets of Glasgow and its uninviting suburbs than the sky cleared as if by magic, and the bright sunshine on the wet green hillsides and rolling woodlands gave us of Scotland at its best.

To the welcome of blue sky, sun and clear rain-washed air was added a kaleidoscopic panorama of unexpected roadside beauties—green fields, hedges thick with wild flowers, the deep olive of the edge of a thick wood, carpeted with emerald moss and slashed with sunshine, a passing glimpse of the brown sides of the valley of a tumbling burn, rich with ferns, the thick grass of rolling parkland, a rocky outcrop, wet and gleaming in the

AFTER THE INAUGURAL MEETING

sun, a clump of stately lupins, a mass of rhododendrons—and yet the streets of Glasgow were only a few minutes behind us.

Scotland certainly welcomed us.

But far better was the personal welcome which awaited us in Paisley, where the arrangements were planned to the last detail, and crowded with interest and pleasure every minute of a visit that was all too short.

The party was met at the Abbey entrance by the Rev. A. R. Howell, an enthusiastic student of the fabric and the author of a standard book upon it. Whilst declaring that a whole day would be insufficient to exhaust all the points of archæological interest, and to study the details of the careful modern restorations of Dr. Rowand Anderson, Dr. Macgregor Chalmers and

The Formakin Party

Sir Robert Lorimer, he succeeded in giving a highly successful résumé of them.

Starting in the nave, which still retains three of the Early English lancet windows of the foundation of 1163 by Walter the High Steward of Scotland, Mr. Howell outlined the history and vicissitudes of the fabric through the centuries—its destruction by the English in 1307; its rebuilding; the fall of the Hamilton tower which left part of the chancel and the north transept in ruins; the neglect after the Reformation; and, in modern times, its several restorations.

Mr. Howell was no mere archæologist content with strings of dates, but one who knew how to weave interest into his discourse. We heard how Robert the Bruce's daughter, Marjorie, was married to Walter the High Steward and became the mother of the first Stewart King, Robert II; how all the High Stewards back to the founder of the Abbey and also King Robert III, lie buried here; how the parents of Sir William Wallace were parishioners of Paisley and how intimately, therefore, he must have known the church as a boy; how in the choir pavement a very ancient Pictish emblem adorns a sculptured slab which is perhaps a palimpsest in stone—the economical mason having re-used the older gravestone.

A particularly interesting feature of the ancient nave is the unusually large corbels between the triforium and the clerestory. It was explained that these were really designed to carry the clerestory walk round the piers as in Rouen cathedral, instead of piercing them in the customary way and thus weakening them in their support of the roof. Their present heavy appearance may be due to the substitution at the end of the eighteenth century of the present flat plaster ceiling for the original open timber roof which would doubtless have shown them in better proportion, and which it is hoped may be restored.

Mr. Howell, having been closely associated with the last restoration—that of the choir—was able to trace for us the evolution of different stages of the work, whilst his knowledge of detail was encyclopædic.

The somewhat unusual form of flamboyant tracery in some of the windows of the restored fourteenth-century choir is similar to that which is to be seen at Melrose. It is interesting that an old stone at Melrose declares one, John Morrow, to have been master mason both there and at Paisley. The east and flank windows of the Paisley chancel are large and open and, probably with intention, light up the interior in strong contrast to the dimly lit nave. This effect has been in no way diminished by the stained glass, that of Dr. Strachan in the east window forming a magnificent blaze of unusually transparent colour. Another of equal beauty by the same artist and a third by Mr. Herbert Hendrie on the south wall were much admired, as was also a particularly beautiful window in blue glass in the north transept, by Mr. Louis Davis, the subject being the story of St. Margaret of Scotland.

It was explained that much thought had been devoted to the artificial lighting of the choir. The lights in the richly carved stalls are concealed, as are others, in the window ledges. These serve to illumine softly the magnificent stone-vaulted roof. Pendant lamps of pierced oak and of round lantern shape on either side are of Gothic form, noted by Mr. Howell in a wrought-iron lamp which hangs over the head of Fra Angelico at Rome. Sir Robert Lorimer was experimenting with this style of lamp when he died, and the idea was finely carried out by his partner, Mr. Matthews. In the short time which remained it was impossible to study the conventional buildings converted after the Reformation into a mansion house. Mr. Howell, however, found time to point out the difference in workmanship which distinguished the different dates of reconstruction; also the interesting crow's-foot gables, and some original thirteenth-century capitals of the restored cloisters' collonade bearing the original mason's marks.

It was an exposition by a master of a most remarkably interesting structure, and the vote of thanks proposed by Mr. R. Mervyn Noad was no mere formality.

A short drive through wooded parkland brought us to Pollok House, a mansion house planned in the stately seventeenth-century style introduced by Charles I at Holyrood. The quiet detail, restrained ornament and well balanced proportions, especially of the garden front with its terraces, are particularly pleasing.

Here we were entertained at tea by Sir John and Lady Stirling Maxwell, who conducted us through palatial apartments containing a fine collection of pictures, mainly Spanish, and thence through gardens of a beauty which few of us will easily forget. The energetic efforts of our local organisers to shepherd the lingerers back to the motor coaches in good time for the return journey to Glasgow, where we were due at a Civic reception later in the evening, were somewhat discounted by our hosts, who insisted on a return through the hall where ices and cigarettes caused a fresh delay.

Not the least interesting item on the return journey from a visit consistently delightful was the site of a housing estate to be carved out of the parkland—or perhaps one should say the "policies" of Pollok—in order to relieve overcrowding in

The Entrance to the School of Art, Glasgow
Charles Rennie Mackintosh
Photograph by E. R. Jarrett [*A.*]

Ayr

Glasgow, and allowed on the condition that it should be laid out in strict accordance with a scheme by Prof. Abercrombie, the drawings of which we had seen the evening before at the Art School. P. J. W.

Tour No. 1

THROUGH THE BURNS COUNTRY TO AYR AND TURNBERRY

We have, unfortunately, been unable to obtain an eye-witness account of Tour No. 1, which was an all-day tour southwards through the Burns country to Ayr. The party visited Rowallan Castle, a fine example of the work of Sir Robert Lorimer, and on the way to Ayr passed Mauchline, Burns' House, Poosie Nansie's Inn, Stair House, the Auld Brig of Ayr and Cromwell's Fort. After lunch the party proceeded to Turnberry, stopping by the way to see the Burns Monument, Alloway Kirk, the Brig o' Doon and Crossragual Abbey, and from Turnberry drove home by Culzean Castle, Shore Road, to Dunure and Ayr, and back to Glasgow through Prestwick and Kilmarnock.

Tour No. 2

THROUGH THE ROB ROY COUNTRY TO ABERFOYLE, DUNBLANE, GLENEAGLES, STIRLING

Tour No. 2 made for the Rob Roy country and the Highlands. Two coaches were filled, chiefly by Scotsmen, but England was represented from Barrow, Bournemouth, and many other places. It is doubtful whether any of the Englishmen had ever heard of an exploit of Rob Roy, or could even have dated him within a couple of centuries, but the Northern contingent were presumably better up in their Walter Scott, and we certainly were instructed by them over a poker painted very red at Aberfoyle. It has figured in Scott and is a valuable asset to the clachan where we stopped for a morning beer. English architects are weak over details of Scots legends. To many Glasgow was their farthest north. They were amazed to see a bathing pool in course of construction at a Road House. Several of these Road Houses were passed: architecturally they are a credit to their country.

So great has been the trek southwards from the Highlands that few of us can be pure English. For instance, when in 1618 the Government and the Campbells rounded up the unruly Macgregors, and by Act of Parliament forced them to change their name, many became Gregorson, which tended to become Grierson, but in the North of Ireland, to which there was much compulsory emigration, Grierson became

Stirling Old Bridge

MEMBERS OF TOUR NO. 2 AT GLENEAGLES

Grayson. So even a particularly peaceful Retired Fellow has a diluted strain of marauding Highland blood.

The West End of Glasgow is remarkable for stone terraces. The outer suburbs and adjacent villages have gardens full of lupins, the lupin in June is the national emblem.

We were told how to pronounce Drymen; it rhymes with women and not Hymen. We felt quite at home viewing the prodigious restoration of Dunblane Cathedral by Rowand Anderson and others; we ascertained that the Cathedral nave for three hundred years of its existence had been roofless.

A very luxurious but airless lunch awaited us at Gleneagles, where a vast caravanserai lies at the foot of the Glen of the Eagles, but no eagles were visible. Nor did we see any mountains, though they were there in abundance, like the courses at the lunch, but an unkindly atmosphere hid them from us. Bright sunshine welcomed us at Stirling, where another large meal was on offer. My advice to all future R.I.B.A. excursionists is to cut out breakfast.

The pleasure of the 120 miles tour through the Highlands was greatly enhanced by our guide, the energetic Mr. Malcolm. He directed our chauffeur, regaled us with much native lore, and got us to our journey's end in ample time to equip for the banquet.

G. HASTWELL GRAYSON [*Retd. F.*]

TOUR NO. 3

FROM GLASGOW BRIDGE WHARF, BY STEAMER DOWN THE CLYDE TO BOWLING HARBOUR, PAST DUNGLASS CASTLE AND ROTHESAY, THROUGH THE KYLES OF BUTE AND LOCH FYNE TO TARBERT; FROM LOCH RANZA, ROUND THE NORTH END OF ARRAN, PAST CUMBRAE, WEMYSS BAY, AND THENCE UP THE FIRTH INTO GOUROCK, AND BY RAIL TO GLASGOW

The complement of passengers on the good ship "Queen Mary the Second," outward bound from Glasgow to Lochranza, although, in every sense of the word, quite a respectable company, fell rather short of the anticipated number. The reason was obvious. One may leap lightheartedly from one's bed and, singing in the bath, anticipate a joyous steamer trip down the Clyde. But, when one gazes through the window of the hotel at a seven-pound leaden sky; at pedestrians feverishly clinging to their hats; at rain making "soldiers," as we termed them long ago, on the pavement, one imagines other and less attractive possibilities and, not improperly, may yield to temptation to recover an immediate and full measure of content by re-seeking the blankets.

However, notwithstanding this depression over the western seaboard, considerably more than one hundred members of the conference armoured themselves in mackintoshes and, remembering that Britannia, and therefore most certainly Scotia, rules the waves, assembled on the deck of the vessel at 9.30 a.m., optimistically bidding one another "Good morning!" For their courage was an ultimate, if somewhat retarded, reward.

As we adventured down the river the banks of the Clyde were curtained in mystery. Sometimes for a moment the veil was drawn aside. We had a glimpse of fields and trees, but, for the most part, we had to content ourselves with the view of shipyards less clearly discernible to the eye than to the ear. To a stranger there seemed to be much business in hand. I ventured to suggest this to a Scotsman nearby. "Busy," he almost snorted, "Busy! Were you never in Glasgow before the war?" With this there arose a coolness between us, satisfactorily resolved later in the comfortable little smoking-room. Therein I confided to him that I had never been north of the Tweed until this conference, but that I was determined to make amends for such culpable negligence during the years that might be left to me. For the Scottish people are indeed a wel-

STEAMING INTO TARBERT

coming race, a people of fine courtesy who bear a gentle regard for the stranger within their gates.

I am not supposed, however, to eulogise Scotsmen nor even Scotswomen, which I think is a regrettable restriction, but to describe Tour No. 3.

Well, we throbbed and slightly rolled our way down the river into the Firth of Clyde, the wind gradually increased in viciousness, the mists became more impenetrable. We saw the "Queen Mary" in John Brown and Company's yard and were not impressed with her bulk until we noticed, on the one funnel that has so far been stepped, what appeared to be a fly. It proved to be a man engaged in his share of preparing this great vessel for her record-breaking career. The famous Castle Rock at Dumbarton we also saw and endeavoured to photograph, and later, on the left bank, Gourock, whence we set our course for the Isle of Bute. The wide intervening stretch of water did not look particularly inviting. The steamer showed immediately certain signs of a liveliness that was not reciprocated in the minds of her passengers. As the horizon rose and dipped against the plate-glass windows of the saloon eyes spake fear to eyes that spake again. Not all of us were so concerned with the future. One merry party on deck had discovered a piano. With a repertoire that ranged from "Abide with Me" to hot jazz, and included in its ambit a far too soulful rendering of "Sweet Genevieve," the poorest sailor

was encouraged to maintain an outward nonchalance. There was another distraction, to wit, a penny-in-the-slot machine, whereat, by careful manipulation of a series of gears, it was possible to secure a halfpenny pencil at an average outlay of a shilling. Of course, one also gained the supreme privilege of achievement.

Ultimately we reached the undisturbed waters of the Kyles of Bute and lunch was opportunely served. It was an excellent lunch, perfectly completed by an announcement from Mr. Lancelot Ross that, in view of weather conditions, the programme would be changed, and that, instead of voyaging to the distant Isle of Arran, we would, on a level keel, glide into Loch Fyne and disembark at Tarbert. This official proclamation was hailed with acclamation.

Nature, having thus triumphed over man's intention, promptly beamed upon us. The sun shone, the wind dropped, the water turned from deadly grey to an alluring blue. The remainder of the trip was as midsummer-like as the most captious could desire. We did land at Tarbert, and paid a penny for the privilege and another penny for sanction to rejoin our ship. Tarbert is a pleasant little village with a climate that must be akin to that of the South of Ireland, fuschia hedges and rhododendrons growing profusely in the open.

Once more aboard we retraced our course through the Kyles of Bute. Wonderful seascapes and landscapes were revealed to us in all the glory of June sunshine. How we pass the house that was once the home of Sir Harry Lauder; there we avert our eyes from a red brick building that must blush each dawn in the knowledge that it is a blot on the countryside, and welcome the approach of mantling dusk. The gong sounding for tea on so lovely an afternoon was almost unwelcome, for it compelled us to go below. The concert party found an escape from the dilemma by having their teapots, scones and other delicacies brought to them and picnicked in one of the ship's lifeboats; a striking example of forethought and inertia.

At length, and all too soon, we drew alongside the pier at Gourock. Here a special train awaited us. Despite the changed programme and other circumstances we left at the scheduled minute. Thus was a day's perfect organisation crowned. Somewhat bronzed and, despite the feasting—an appropriate term to apply to our gastronomic treatment on board the steamer—with keen appetites we reached the Central Station and separated to our various hotels. Garbing ourselves as directed in presidential badges and decorations we hied to the banquet and, after dining, wining and listening to speeches, a memorable day closed with "Auld Lang Syne." It was a fitting ending.

HARRY ALLBERRY, P.R.I.A.I.

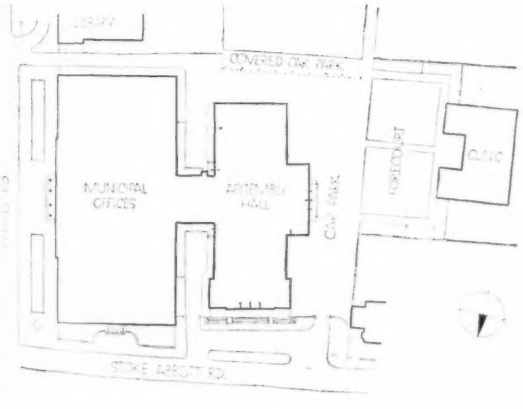
THE TRONGATE, GLASGOW

From Swarbreck's *Sketches in Scotland*, 1839

The marquise over the main entrance has a bronze fascia and a plywood soffit, cellulosed white. Lighting is by a row of opal lamps sunk in the outer edge. The main doors are of bronze

THE MUNICIPAL ASSEMBLY HALL, WORTHING

Architect: C. Cowles-Voysey [F.]

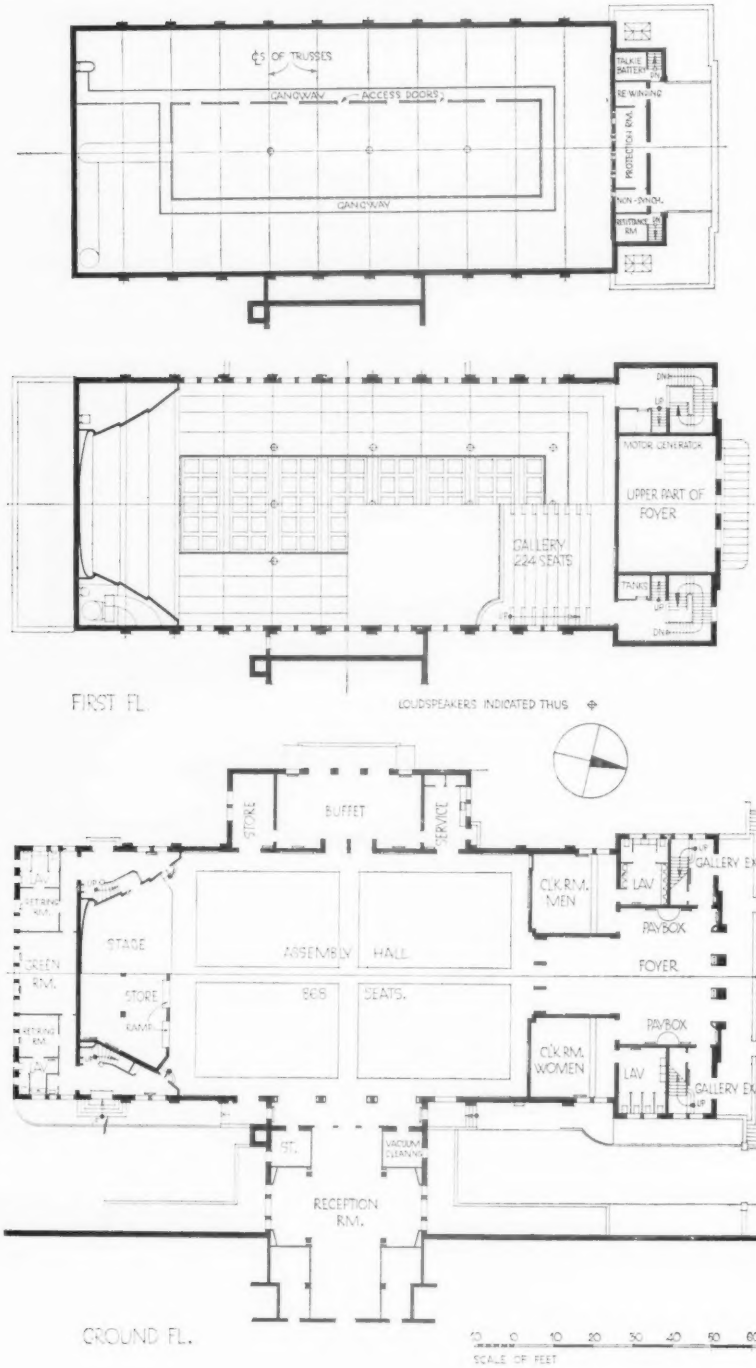


This building is one of a group of municipal buildings, the result of a competition held in 1930 for which Mr. Henry V. Ashley [*F.*] was the assessor. The group comprised a clinic (erected first), a municipal office building and an assembly hall. The municipal offices were opened in May 1933.

The total cost of the scheme has been £160,000, of which the offices cost £90,000, plus £15,000 for furniture; the assembly hall cost £40,000, plus £5,000 for furniture; the clinic cost £10,000.

PLANNING

The site is approximately level. The municipal offices face Chapel Road, which is the main road, and the assembly hall is set back from the frontage of Stoke Abbott Road, allowing ample room for cars. The clinic has a lawn in front of it.

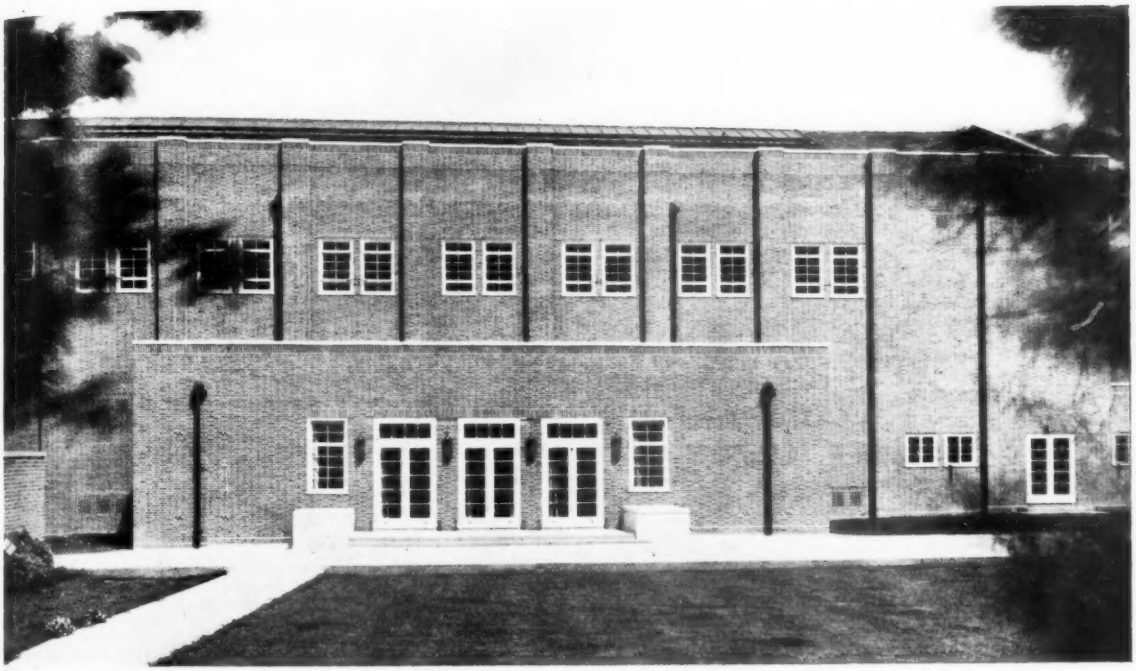


The hall is designed for the multifarious purposes of a municipal hall. These include dancing, for which the main floor is flat; cinematograph displays, for which projection rooms are provided; small concerts, for which dressing and green rooms are provided, and the stage equipped with movable stepping; banquets, for which service rooms and a public address system (similar to that in the R.I.B.A. building) are provided; public meetings, for which the acoustic treatment has created a short reverberation period with ample resonators. A reception room forms a link between the municipal building and the hall for municipal receptions.

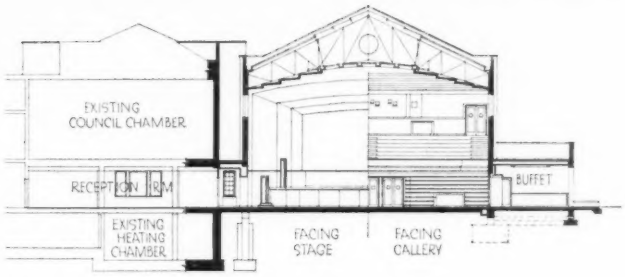
CONSTRUCTION

The main framing is of structural steel, supporting steel roof trusses. The infilling is of brick, the facing being in 2 inch light brown, multi-coloured, sand-faced brick with

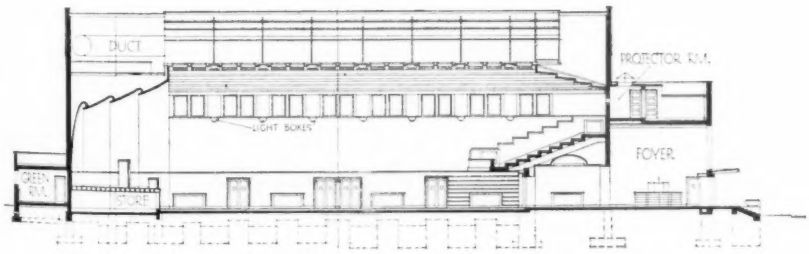
The hall is designed for dances, cinematograph shows, public meetings, concerts and banquets



The walls are faced with 2 inch light brown sand-faced bricks with cream pointing, and the dressings are of artificial stone. The wooden windows are painted cream.



CROSS SECTION



LONGITUDINAL SECTION

cream coloured, rough textured pointing. There is a small amount of white artificial stone. The roof is double, with slate and glass upper surface, which is largely concealed by the parapet; the ceiling is of fibrous plaster and contains a large laylight. Windows have wooden frames painted cream.

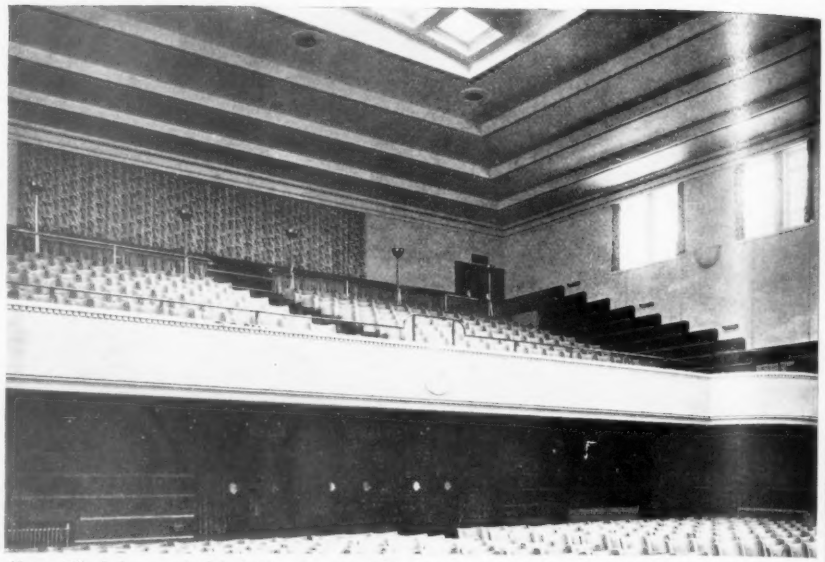
STRUCTURAL FINISH

The panelled dado of the hall is of blistered mahogany, marked by recessed horizontal bands of Canadian maple; the skirting is laurel. Above the dado, the walls and balcony front are faced with buff acoustic plaster; the stage and ceiling are lined with hard

surfaced fibrous plaster and act as sound reflectors.

The main external doors are of bronze and lead into an entrance hall of which the walls are sprayed with a mixture of bronze and aluminium, giving an effect of old gold. The floor is of cream terrazzo in patterns, with some inlay of green vitreous glass mosaic. The joinery is of English walnut. Two plaster reliefs over the payboxes are by Laurence Bradshaw. The lobby between the entrance hall and the hall itself is carpeted to reduce noise outside the doors during meetings.

The buffet, which has French windows leading to the car park, is in light colours, the floor being oak and the walls of light beige-coloured hard plaster incised with linear designs of which the incisions are painted red.



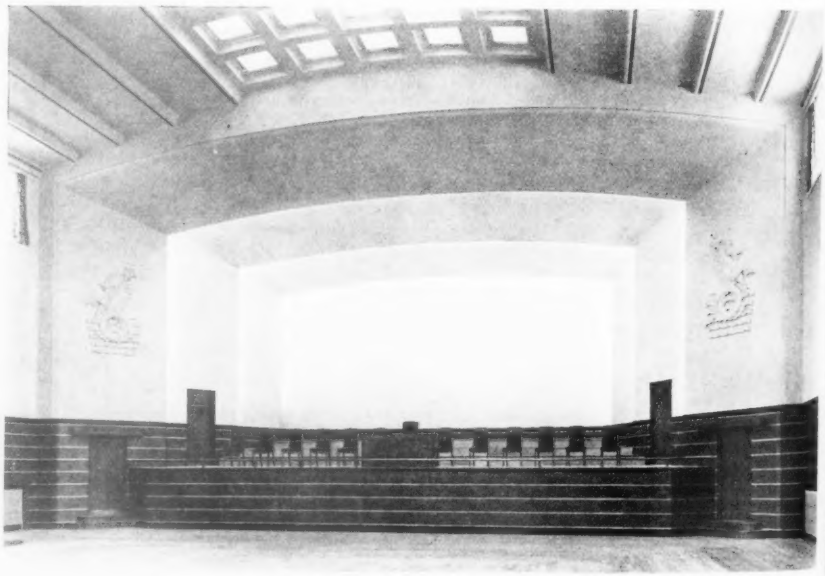
Above: The balcony end of the hall. A curtain hides the openings for the cinema projectors and also acts as an acoustic absorbent. Two of the built-in loudspeakers can be seen in the ceiling. Below: The stage end. The fibrous plaster stage lining is formed in light slots containing tubular lamps. The panelling is of blistered mahogany, with maple strips. The seahorse reliefs are by Mr. Laurence Bradshaw

EQUIPMENT

The seating is in sets of three and four and of theatre type but removable. There are 868 seats on the ground floor and 24 seats in the balcony; the latter are fixed. Heating is by low pressure radiators in recesses at floor level, operated from the main boiler plant. There are fresh air inlets behind them and an exhaust system in the roof extracts vitiated air through grills in the laylight. A vacuum cleaning plant is installed.

Artificial lighting is mainly through the laylight, with indirect plaster half bowls on the walls and on bronze standards in the gallery. The three slots on the stage contain continuous white tubular lamps. The removable stage stepping is fitted with plugs for music rests. All the main lighting is dimmer controlled by push-button operated both from the entrance hall and back stage. There is an alternative system of direct emergency and cleaners' lights.

The public address system consists of eight "soft-speakers" in the ceiling connected through an amplifier to microphone plug points round the walls. This is for use at banquets.



CONSULTANTS

Structural Engineer, Mr. Burnard Geen, M.Inst.C.E. Equipment Engineer, Dr. Oscar Faber, O.B.E. Acoustic Consultant, Mr. Hope Bagenal [*A.*]. Quantity Surveyor, Mr. H. J. Venning, F.S.I. [*A.*]. Modelled and incised wall reliefs, Mr. Laurence Bradshaw.

CONTRACTORS AND SUPPLIERS OF MATERIAL

GENERAL CONTRACTORS: James Longley and Co., Ltd.

STRUCTURE: Steelwork, Redpath, Brown and Co., Ltd.; artificial stone, Empire Stone Co., Ltd.; asphalte, Asserati and Co.

STRUCTURAL FINISH: Plaster, F. de Jong and Co.; terrazzo, Art Pavements and Decorations, Ltd.; acoustic plaster, etc., May Acoustics, Ltd.; metal laylights and casements, C. E. Welstead, Ltd.; metal work, Bainbridge, Reynolds, Ltd., and Comyn Ching and Co., Ltd.; marquise and bronze entrance doors, Garton and Thorne, Ltd.; woodblock flooring, Stevens and Adams, Ltd.; roof glazing, Haywards, Ltd.; joinery and fittings, John P. White and Sons, Ltd.

EQUIPMENT: Heating, Rosser and Russell, Ltd.; electrical installation, Grierson, Ltd.; light fittings, G. H. Turner; sanitary fittings, H. Pontifex and Sons; clocks, Gillett and Johnson, Ltd.; fire appliances, Mather and Platt, Ltd.; vacuum plant, Sturtevant Engineering Co.; public address equipment, R.M. Radio, Ltd.

MISCELLANEOUS: Furniture, Hampton and Sons, Ltd., and Heal and Son, Ltd.; ironmongery, Yannedis and Co., Ltd.; paint, Mander Bros.; W.I. ladders, R. Grant and Son; sign writing, Eric Munday, Ltd.

Left: A general view of the interior. Artificial light is from the laylight and indirect half-bowls on the walls. Below is the buffet decorated with linear designs, incised in the plaster and coloured red

Review of Practice

RIGHTS OF LIGHT IN MAYFAIR

FISHENDEN *v.* HIGGS AND HILL

The press reports, necessarily condensed, of this case having aroused widespread interest and speculation as to what changes (if any) it may have made in the law of ancient lights, the following note has been compiled at the request of the Practice Standing Committee from the official transcripts of evidence and judgments of Mr. Justice Crossman and of the Court of Appeal, and the drawings submitted by both sides in so far as they were agreed. The case is still *sub judice*, the Court of Appeal having ordered an inquiry into damages without specifying the point from which actionable injury was to be computed, although it had been held that the plaintiff was not entitled to all the light which he enjoyed under the original obstruction.

The action was brought by a lessee with a substantial unexpired term of No. 8 Chesterfield Gardens, a cul-de-sac running north and south along the rear of Chesterfield House, on the site of its original gardens. No. 8, the last house on the east side, faced west towards the stables—a group of comparatively low buildings—beyond which lateral light was enjoyed.

In accordance with the decision of Mr. Justice Maugham, as he then was, in Sheffield Masonic Hall *v.* Sheffield Corporation (1932/2/Ch.), both sides assumed this lateral light to be liable to reduction by future buildings against which the plaintiff would have no legal remedy, the plaintiff's daylight plans assuming a building 60 feet high on the site of the Red Lion P.H. extending across the northern end of the cul-de-sac, and the defendant's daylight plans assuming an obstruction to the north-west, of the equivalent of a continuous building 100 feet high and 100 feet distant.

At an early stage in the hearing the daylight plans on both sides were adjusted to correspond in material particulars and agreed by the respective experts. They also agreed that the effect on the lateral light of raising the building at the north end of the cul-de-sac as assumed by the plaintiff was for all practical purposes identical with that of a continuous obstruction 100 feet high and 100 feet distant as assumed by the defendants.

The proposed building complained of, a large block of flats, consists of a main block running north and south, with a ridge equivalent to a continuous obstruction 98 feet high and 99 feet 6 inches distant from the front of the plaintiff's projecting bay windows. Two wings 26 feet 6 inches wide and 80 feet high project 32 feet 6 inches from the east front; the front walls of the wing being 59 feet distant from the front wall of the plaintiff's bay window. One of these wings is opposite to No. 8 Chesterfield Gardens, which, having previously enjoyed the advantage of the lowest part of the original obstruction and the maximum of lateral light from the north-west, was thus threatened with the maximum obstruction from the new building.

The plaintiff in his statement of claim alleged injury to rooms on the basement, ground, first and second floors, but it was held that actionable injury would only be caused to the basement and ground floor.

On both these floors the rooms affected north and south of a central hall or passage were lit by similar windows, but varied materially in depth; the north rooms on the ground floor being about 20 feet deep and the south rooms about 30 feet deep.

The ground floor south room had been converted by the plaintiff within the period of prescription into a flat by cutting off from the front portion a bathroom on one side and an enclosed staircase on the other leading to a bedroom in a gallery at the back of the room. The room as a whole, and in particular the front half of it nearest to the windows, was thus reduced in size by the enclosures to the bathroom and staircase.

The proposed obstruction was partially completed at the date of the trial.

Daylight plans showing the disposition of floor area above or below the "grumble point" of 0.4 per cent. cill ratio were adduced on both sides; the contours representing the proposed conditions of obstruction with and without lateral light from the north-west having been brought into conformity by the experts on each side and agreed.

Both sets of plans indicated that under the original conditions of obstruction certain areas at the back of all material rooms were below the "grumble point."

Evidence was given by the plaintiff that whereas he had formerly been able to eat his lunch by natural light, he now had to use artificial light. No evidence was elicited as to the position of his luncheon-table in the room.

Evidence was also given by the plaintiff's steward as to inability to read and work on accounts at stated positions in the north room in the basement, one of which positions was at the fireplace at the back of the room, which was approximately 20 feet deep, the top of the window being approximately level with the street pavement.

The steward also gave evidence as to the basement of No. 8 having been better lit under the original conditions of obstruction than basements in which he had lived in two West End squares and as being the best lit basement he knew in London.

Technical evidence given on behalf of the plaintiff was to the effect that until the daylight plans were seen exception had only been taken to the projecting wings and that in negotiating the permissible height of buildings objection to 45 degrees was considered to be unreasonable; and further that a room ought to have at least half of its area above the "grumble point" in order to light a central table, but it was not expected that this would obtain in West End streets, nor would it apply to basements.

For the defendants, it was stated that the proposed building would leave the plaintiff as much light as the generality of houses in Mayfair, excluding exceptional instances of obvious over-building, and rather more light than the older houses with lower window heads, and that the building had been kept within the limits of 45 degrees upon which Mayfair had been originally laid out, which limits the present Grosvenor Estate were adhering to in new buildings. Confirming the evidence on behalf of the plaintiff it was considered that the effect of the projecting wings was an immaterial addition to the obstruction of the main building and that the difference caused by increasing the distance to which a 45 degree obstruction was taken—*i.e.*, the difference between building 50 feet high and 50 feet distant and 100 feet high and 100 feet distant—was immaterial to basements and ground floors, but had an increasing effect on upper floors.

It was further stated on behalf of the defendants that rules as to any fixed proportion between the adequately lit and inadequately lit portions of rooms were of no practical value on account of the number of variants, each of which might be material.

Measurements of angles of obstruction in typical Mayfair streets in the vicinity were proved and the limits within which architects usually settled disputes were described; instancing Kingsway, with buildings approximately 100 feet high and 100 feet apart, as an example of good modern design as to light.

Mr. Justice Crossman held that although the plaintiff was not entitled to the whole of his original light, actionable injury had been proved with regard to the basement and ground floor rooms; and he granted an injunction under which the defendants were called upon to remove or to refrain from erecting so much of the proposed building as would occasion illegal obstruction.

The appeal was expedited; counsel having agreed upon limits within which the building might proceed in the meantime.

The Court of Appeal, after a careful and extensive review of the evidence, held unanimously that the case was one in which damages would be an adequate and proper remedy and discharged the injunction.

The judgments, which constitute an authoritative survey of important aspects of the law of light, are quoted somewhat fully below.

The Master of the Rolls, after outlining the facts as to the respective buildings, said:

> The plaintiff claimed an injunction to restrain the defendants from erecting or continuing to erect a new building which would in any way cause a nuisance by the interruption of the plaintiff's light to which he was entitled, it being without question that the plaintiff has a right to ancient lights in his premises. Mr. Justice Crossman granted an injunction, mandatory in form, which did not condescend into actual particulars, requiring the defendants to remove so much of their building as should interfere with or constitute a nuisance or obstruction or interference with the plaintiff's rights of light.
>
> I think it is very important that I should state some of the facts relating to these premises, for it is upon an application of the facts and to those facts that one has to apply the rules laid down in numbers of cases which deal with ancient lights. Chesterfield House stood in what may be called its own grounds and was set back some distance from the margin of the grounds. There were a series of steps down from it to what I may call a garden or courtyard, and that courtyard was, I think, something like 10 or 15 feet back from the eastern margin of the site. The house was, in the main, a square house, but it had adjuncts to it which were not raised to the same height as the main building. Chesterfield Gardens was a cul-de-sac, and at the north end of it it was closed by some buildings which are approached from another street, and part of those buildings which are on the other side of the cul-de-sac was a certain "Red Lion" public-house which, at the present moment, does not seriously obstruct the light to Chesterfield Gardens, but it stands upon a site upon which there could be a larger building built if it was required to do so. As I have said, the plaintiff's right to ancient lights is not disputed, nor is it disputed that there will be some interference by the proposed building to the light which will reach the plaintiff's premises. The learned judge held there had been proof given that the ground floor and the basement did suffer or would suffer a nuisance by reason of the diminution of the light, but with regard to the rooms on the first and second floors he held that there was no nuisance proved. The learned judge came to the conclusion that it was a case in which he ought to grant an injunction. Upon that part of the case it is important to see what the conduct of the defendants has been. The learned judge found in his judgment that no doubt the defendants acted honestly, as they thought, on their rights. It is important from the point of view of the defendants that that should be quite clearly stated and definitely appreciated.
>
> Before the action was brought certain correspondence took place between the plaintiff's advisers and those who represented the defendants, and there are one or two letters in the bundle of correspondence to which I must call attention.
>
> On 12 July Messrs. Burnett and Eprile, who were acting on behalf of the defendants, wrote this to the owner of 8 Chesterfield Gardens:
>
> > "Clients of ours have under consideration the rebuilding of Chesterfield House. Although it is not anticipated that the scheme now being considered will affect the lighting of your premises to any extent that would be material, our clients have desired us to communicate with you, in common with all their neighbours, in order that you may be acquainted with their proposals in case you may be apprehensive with regard to the effect of the rebuilding upon your property. Therefore if you

> would care to put your architect in touch with us we should be glad to show him the plans of the proposed building, and as our clients are responsible for raising the question of the effect of their proposals, they desire to be allowed to consider themselves also responsible for the reasonable charges of your architect in the matter, even though, as they contemplate, his opinion will be that your light will not be materially affected in any way. If you are not the freeholder of the premises we would be very obliged if you would kindly inform us as to the length of the term of your interest in them, and also the name and address of your lessors."

That is a very fair and a very honest letter. After a time it was replied to and the parties got into touch, and on 19 July, the same firm, Messrs. Burnett and Eprile, wrote to Mr. Cole, who was then acting for the plaintiff: "We are informed by Mr. Fishenden that you are acting for him and that he has forwarded our previous letter to you. We have now completed our diagrams showing the relationship of your client's house with the new building on the site of Chesterfield House, and I am enclosing copies of these diagrams for your information. You will note that, except for two small towers, the new building will be set back some considerable distance from the boundary line in Chesterfield Gardens, and that the angles of light from your client's ground floor windows will be very low having regard to the locality." Upon that the answer of Mr. Cole, on 26 July, is: "In my opinion my client would suffer material damage. I must ask you to consider some adjustment with regard to the projecting wing". . . .

There was, therefore, at that point, a matter which gave concern to the plaintiff as to whether or not he would suffer injury. The correspondence continues, and the plans and elevations of old Chesterfield House were sent to Mr. Cole on 31 October. There is no doubt about it that for the most part the focus of the complaint which was made by Mr. Cole was in reference to the wing or turret which was in front of the plaintiff's windows, but the parties were negotiating or rather considering what the actual position was, and I cannot, for my own part, attach any fault to the plaintiff if ultimately he asserted his whole rights, although during the previous months he had directed attention more particularly to the actual position of the projection which was contemplated. Suffice it to say that, after this correspondence had taken place, in a proper spirit on both sides, the parties failed to come to any adjustment, and the result was that, in order to test his rights and to assert them, the plaintiff issued his writ on 19 January of this year. The trial took place on 30 March and in the early days of April, when the result was reached to which I have already referred, and the defendants were ordered by a mandatory injunction to take down a part of their building and to modify their plans so as to avoid causing any nuisance to the plaintiff's lights. There was, of course, a contest before Mr. Justice Crossman as to whether or not an injunction was the right remedy to which the plaintiff was entitled. But he determined that the injunction ought to go. From that decision the appeal is brought to this court, and it is, in form, directed alternatively to saying that the plaintiff had not proved that the proposed building when completed would cause a nuisance to the plaintiff's right to light, or that such remedy as the plaintiff may be entitled to ought to be confined to damages and not to an injunction. We have heard the matter at some length, not by any means at too great length, for it is quite obvious that the matters concerned are of importance to the parties, and it has been necessary to look with some care into the cases that have been decided. We have come to the conclusion that the learned judge was right in holding that there had been or was intended to be an invasion of the plaintiff's right—that the building when set up by the defendants would cause a nuisance to the plaintiff.

After quoting and commenting on extracts from well-known judgments defining legal nuisance as to light his Lordship proceeded:

A good deal of evidence was given in this case by experts who claimed to be experts in determining what is the normal amount of light to which persons are entitled in what may be called a normal room. . . . They have laid down what is called a grumble point, namely, a point at which you are unable, except under the fortunate possession of brilliant sunshine, to read without difficulty, and they have endeavoured to show that this is a standard which ought to be conformed to, and there was evidence, which was in the main accepted, on the lines that there would be considerable interference with the amount of light which would reach the plaintiff's windows. But it was said that, although that may be so, there are other considerations which have to be borne in mind and that you must take into account, as other cases have taken into account, the locality, and you cannot expect in a town crowded with buildings the same amount of access of light as you would expect in more fortunate districts, and so it is said that you must always consider what is the locality. That view was rejected by Mr. Justice Russell, as he then was, in a case of *Horton's Estate v. Beattie*.

The rule laid down in Colls' case is referred to, and then the argument which was there presented to him was that

> "in considering whether the decrease in light constitutes a nuisance the standard of comfort prevailing in the locality must be taken into account. Much turns on the nature and locality of the window, the supply of light to which has been interfered with. Persons who live in towns cannot expect the same volume of light as those who live in the country,"

and a number of cases are referred to for that proposition, and then it goes on:

> "Even if this room be inadequately lighted according to ordinary standards the evidence shows that it is adequately lighted according to the standard prevailing in Wolverhampton, a manufacturing town, and therefore no actionable wrong has been committed. The amount of light to be left is not to be tested by any hard and fast standard, but by reference to the general standard of light in the district."

Mr. Justice Russell rejected that view, and he said this:

> " The standard of lighting required to survive in order to eliminate the existence of a nuisance seems to me of necessity an absolute standard. The human eye requires as much light for comfortable reading or sewing in Darlington Street, Wolverhampton, as in Mayfair. True, no doubt, it may be that as a rule buildings are more crowded together in manufacturing districts than in residential neighbourhoods. Lights have been obstructed, and no doubt where they have been ancient compensation has been accepted," and so on, "I can see, however, no reason in this for saying that a man whose room in such a locality has been turned into a room no longer adequately lighted for ordinary purposes has not suffered an actionable wrong."

It was claimed that that view is incorrect, and it was said in particular that the locality here must be considered, that it had not been adequately considered by Mr. Justice Crossman, and that on that in particular he had misdirected himself. It was said that if you will take this locality or area which was described as Mayfair, you will find that in a great number of streets there is much less light than will be left to the plaintiff

after the building, as proposed, has been erected. I confess I find great difficulty in applying any doctrine of locality with such particularity as that suggests. I can understand that you may have a locality which may be described as residential or manufacturing or industrial, and different considerations may apply in those areas to which you can apply these adjectives broadly. But I do not find it possible to accept that by "locality" you mean an area which is determined in its limits arbitrarily or perhaps usefully for postal purposes. . . .

It seems to me quite unreasonable to say that, because you find that in some places in Mayfair there is less access of light than would be left here in Chesterfield Gardens, it can be said that the plaintiff has suffered no wrong. . . .

If you are only to select particular streets, it seems to me that the test of so-called locality must break down.

After expressing preference for the lay evidence given, his Lordship proceeded:

It will be observed from the passages I have quoted and the principles which are laid down that they are very loose; it is almost impossible to reach precise definitions when you are talking of the occupation of a house uncomfortable according to the ordinary notions of mankind, when you are talking of different localities and the like.

After quoting a direction to a jury by Best, C.J., his Lordship added:

If one attempts to do more than give a broad rule which may be given to the jury for the purposes of their coming to their verdict, I think one gets into a range of difficulties which are by no means easy to solve.

Having regard to the facts which were proved in this case, I think it would be unreasonable to treat Chesterfield Gardens on the same bases as other streets in Mayfair. It may be that for the purpose of local administration Chesterfield Gardens is a street, but it is a street in which there is a considerable access of light, and to the whole of that quantum the plaintiff is clearly not entitled; but he is entitled, I think, to have consideration given to the type of house in which he is living, and that in a locality which is residential rather than manufacturing or industrial and one in which, perhaps, the value of the house is enhanced by its situation, and you may test what would be uncomfortable and would be a privation of light as somewhat different in this particular house than if it was being used for wholly different purposes and not residential purposes. But, having regard to the learned judge's judgment in this case in the Court below, I am satisfied that he did not in any part of his judgment leave out of sight the question of locality, or misdirect himself upon the evidence on the main question of whether the plaintiff had suffered a nuisance or not. It is quite true that he did not refer in actual terms, in the later portions of his judgment, to locality, or use the word "locality." But in the first seven or eight pages he clearly indicated that he had got that in mind, and I think it would be an unfair criticism of his judgment to treat it otherwise than directly in accordance with the rules which have been laid down.

On the question of locality I will only add that Lord Loreburn, in the case of *Kine v. Jolly*, which is reported in 1907 Appeal cases at page 1, says this:

> "He does not obtain by his easement a right to all the light he has enjoyed. He obtains a right to so much of it as will suffice for the ordinary purposes of inhabitancy or business according to the ordinary notions of mankind, having regard to the locality and surroundings."

There is a passage by Lord Parker in the case of *Dysart v. Hammerton*, which is reported in 1916 (1) Appeal Cases at at page 86, where he says:

> "Further, the character or circumstances of the neighbourhood are always material in considering the degree to which the owner of the right said to have been infringed is entitled to immunity from interference by others. What may be a nuisance by smoke or noise or interference with light under one set of circumstances is not necessarily a nuisance under a totally distinct set of circumstances. That which the law protects is the reasonable enjoyment of the right in question, and in deciding whether the right is infringed the law has due regard to the needs and interests of others. The convenience or inconvenience entailed by the assertion of the right is not without its materiality."

I have read those passages for the purpose of making it clear, as I think it ought to be made clear, that the learned judge rightly directed himself upon the main point. . . .

Now comes another very difficult question: What is the remedy which is to be employed? No doubt in the old days before the passing of Lord Cairns's Act in 1858 there would have been in equity an injunction granted. If the action had been brought at law for nuisance, damages would have been granted. The Courts of Law could not have granted an injunction, and the Courts of Chancery could not have granted damages. But by Lord Cairns's Act, which is 21-22 Victoria, Cap. 27, it is declared by section 2, reading the relevant parts, in all cases in which the Court of Chancery has jurisdiction to entertain an application for an injunction against any wrongful act, "It shall be lawful for the same Court, if it shall think fit, to award damages to the party injured . . . in substitution for an injunction in all cases." Some efforts have been made to lay down some guiding rules as to when the Court ought to choose or adhere to an injunction or when it is sufficient that it should grant damages.

His Lordship then dealt with the question as to whether the well-known four rules in *Shelfer*, 1895, 1 Ch., page 317, relating to damages or injunction, limited the discretion of the Court, and continued:

It seems to me therefore that these rules in *Shelfer's* case must now be taken with the concomitant passages to which I have referred in the later cases, in *Colls* and in *Kine v. Jolly*, and that we ought to incline against an injunction if possible. It is not possible to say what the injury to the plaintiff will be when estimated in money. I think the damages that he may be given will be a substantial sum—not a trivial sum like £50 or £100, but a substantial sum. On the other hand, the defendants have certainly acted with circumspection, and I think with a desire to avoid any unreasonable invasion of the plaintiff's rights, and certainly not to take him or catch him at a disadvantage. Their conduct enures to their benefit, and therefore we have to consider what would be the result to them.

I have come to the conclusion, on the whole, that this is a case in which damages will be a sufficient remedy. Even though those damages may sound a not inconsiderable sum, we are dealing with sites of large value. The plaintiff himself has to pay a high rental, and he is subject to a covenant under which he had to make a large outlay when he took possession of these premises. One cannot be surprised, therefore, if, appropriately to the site and to his own position as lessee, the figures involved are considerable. But I also think that one

ought to consider whether the defendants will be oppressed in the sense that they will lose so very large a quantum of the enjoyment of their site as to amount to oppression. In all the circumstances of the case, following Lord Macnaghten's rule and following Sir George Jessel's rule, I think we ought to leave the matter to be decided by the imposition of damages. Therefore there will be an order that the case be remitted for the purpose of ascertaining what damage the plaintiff has suffered, and the mandatory injunction will be discharged.

Lord Justice Romer: I have arrived at the same conclusion. The attack upon the decision in the court below is made upon the ground that Mr. Justice Crossman misdirected himself upon the law applicable to the case, in that he disregarded all questions of locality, that is to say, it is said that Mr. Justice Crossman paid no attention to the character of the neighbourhood in which the plaintiff's house is situated. I do not think that criticism is well founded.

Here follow quotations from the judgment in the court below.

It is true that in those passages there is no direct reference made to any question of locality, nor indeed is there any direct reference to such a question in any part of the learned judge's judgment. But neither will you find any direct reference to the question of locality in the statement of the law made by Lord Macnaghten in *Colls'* case, nor will you find any direct reference to locality in the passages from *Back v. Stacey* and *Parker v. Smith* and *Wells v. Ody* cited by Lord Macnaghten in his speech. If Mr. Justice Crossman misdirected himself, then so did Lord Macnaghten, Chief Justice Best misdirected the jury, and in *Parker v. Smith* the same charge could be brought against Chief Justice Tindal, and, in *Wells v. Ody*, against Baron Parke. But it must be taken that none of those learned judges was ignorant of the fact that in all cases relating to nuisance, the question of locality has to be taken into consideration, though I venture to think that in cases of nuisance by obstruction of ancient lights the question of locality has very much less to do with it than cases relating to other nuisances. In point of fact there is a passage later in the judgment of Mr. Justice Crossman which seems to me to indicate pretty clearly that he had in his mind the question of locality, because after again stating the question he had to decide, which was whether what the defendants had done would interfere substantially with the comfortable use and enjoyment of the plaintiff's house as a dwelling-house according to the ordinary requirements of mankind, he says this:

> "I think that 'according to the ordinary requirements of mankind' does not mean having regard to the precise amount that people in the streets round about have got, but having regard to what a reasonable person—which is the expression to use—would require."

A reasonable person would not expect precisely as much light in Mayfair as he would get in the country, and he would not expect precisely so much light in the City of London as he would get in Mayfair.

After considering the lay evidence with regard to the ground floor rooms, his Lordship proceeded:

The learned judge also found that the rooms in the basement would be darkened, and he accepted the evidence as to the effect of the defendants' building upon the light to the rooms in the basement. It must, however, be remembered that as regards the rooms in the basement, whoever originally built Chesterfield Gardens thought fit for his own purposes to build his basements, as most basements are built, in the ground, and that the light coming to them over Chesterfield House was largely obstructed by the fact that they were built in the ground and that in front of them—at what height I do not precisely know—there was the wall of the area. In those circumstances the plaintiff could not complain of any obstruction to the light of the basement, if that obstruction would not have been actionable, if he had chosen to build his rooms in the basement without the obstruction of the area wall in front. If, however, the defendants' building would cause an actionable nuisance to those rooms if they had been built without the area wall in front, then the plaintiff is entitled to complain. In those circumstances it is only necessary really to consider the question of the rooms on the ground floor, because, if the rooms on the ground floor had not been obstructed to an actionable extent, then the rooms in the basement would not have been obstructed. If, on the other hand, the rooms on the ground floor have, as the learned judge found, been obstructed to an actionable extent, then so must the rooms in the basement have been. I am therefore of the opinion that the learned Judge was right in deciding that the plaintiff had sustained an actionable nuisance in respect of the obstruction of the light to the rooms four and six on the ground floor and, therefore, the rooms one and three in the basement.

The question then arises as to whether the plaintiff should be granted an injunction, or whether he should merely be granted a remedy in damages. It has been said by Mr. Gavin Simonds that in all these cases of injunction or damages the court exercises a discretion, and that where the learned Judge in the court below has exercised his discretion, this court should not interfere with that exercise of discretion. As regards that, I would point out, as the Master of the Rolls has pointed out, that in *Kine v. Jolly*, this court, under Lord Cairns's Act, did interfere with the exercise of discretion by Mr. Justice Kekewich.

The exercise of discretion by the learned Judge can always, of course, be reviewed if it appears that, in exercising his discretion, he has proceeded upon a wrong principle. With all respect to Mr. Justice Crossman, I think that as regards this question of injunction or damages he has misdirected himself, because he seems to have come to the conclusion that if, in any case, any one of the four conditions referred to by Lord Justice A. L. Smith are not fulfilled, the Court must grant an injunction. But I do not take that view at all. Where the four conditions enunciated by Lord Justice A. L. Smith are fulfilled I do not doubt that a court will grant damages in lieu of an injunction. But it by no means follows that Lord Justice A. L. Smith intended to say or did say, or in fact could say, that in all cases in which those four conditions do not prevail the injunction must be granted, and could not be intended to have fettered the discretion imposed upon the Courts by Lord Cairns's Act. The fact that he did not do that is apparent, I think, from the judgment of Lord Justice Lindley in the same case (1895, 1 Ch., page 317. . . .).

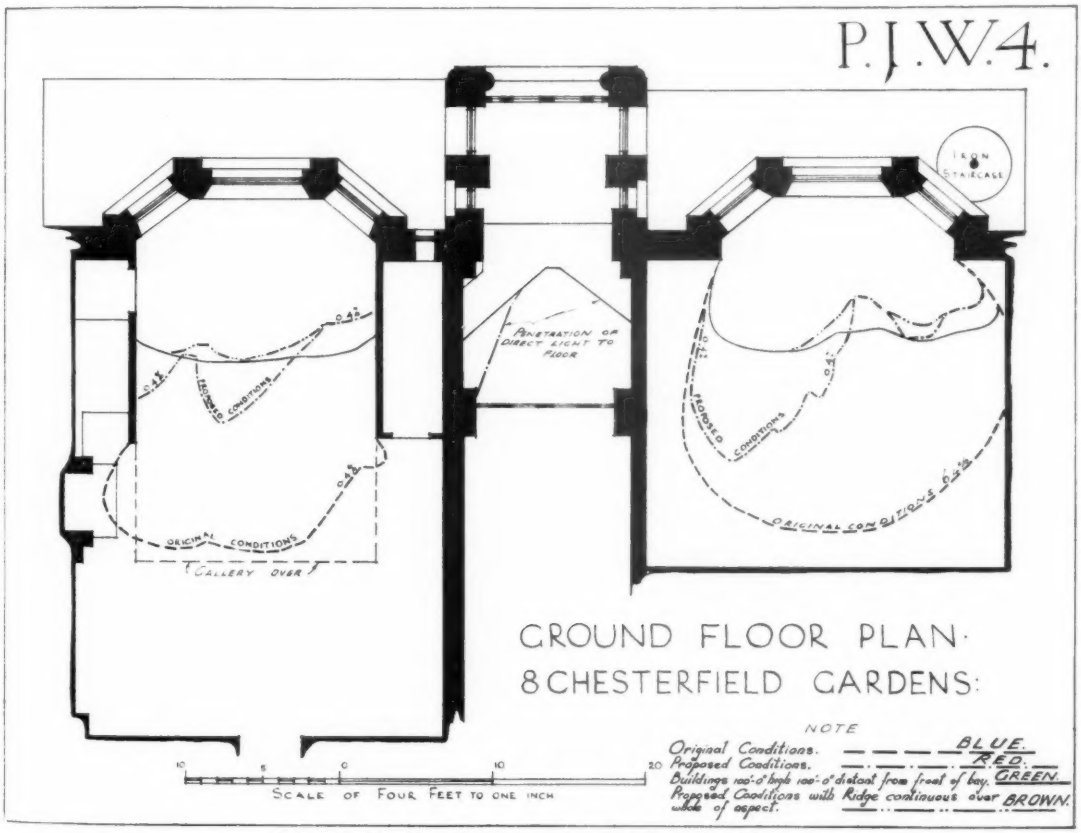
It is quite plain, therefore, that in every case, even though the four conditions laid down by Lord Justice A. L. Smith are not to be found, the Court has, having regard to all the circumstances of the case, an exercise of its discretion in the matter. What Lord Macnaghten said in *Colls'* case is, of course, to be taken very seriously into consideration in all cases relating to light when the question of the exercise of this discretion crops up. I will not read the passage at length; I will only refer to this part of it: "But if there is really a question as to whether the

obstruction is legal or not, and if the defendant has acted fairly and not in an unneighbourly spirit, I am disposed to think that the Court ought to incline to damages rather than to an injunction. . . ."

It cannot, I think, be said that the defendants in this case have not acted fairly or in a neighbourly spirit. But there is one other circumstance to which personally I attach the greatest importance. In my opinion, having regard to the conduct of the plaintiff up to the time of the trial of this action, it would be unfair to grant him an injunction in respect of the main part of the building.

After citing material passages from the correspondence and evidence, his Lordship continued:

It is true that in the statement of claim, which was delivered at about this time, the plaintiff's objection was not confined to the wing, nor, of course, would it be confined to the wing in a plea by any wise pleader. The fact of the matter is that the defendants' attention was never specifically called to the question that the plaintiff really objected to anything other than the wing. In those circumstances the defendants proceeded with the erection of their main building. . . . In those circumstances, speaking entirely for myself, I think that, in the words of Lord Justice Lindley in *Shelfer's* case, " The plaintiff has so conducted himself as to render it unjust to give him more than pecuniary relief in respect of the main building." The same thing, of course, cannot be said of him as regards his claim in respect of the wing. But when one puts to oneself the question whether an injunction should be granted in respect of the wing alone, or damages in respect of the wing should be granted, it is to be observed, now that we have got the daylight plans before us, that the additional obstruction caused by the wings is very small indeed—the amount of it is more or less accurately shown on Exhibit P.J.W.4, it being the space of light between the brown line and the green line. That is to say, if the wings were not there, the light left to the plaintiff in the rooms indicated on P.J.W. 4 would go back to the green line instead of the brown line. That was a very small interference in fact with the light—it is an interference which, by itself, would add very little to the damages sustained by the plaintiff, and, in the circumstances, it would, I think, be oppressive to the defendants,



PROPOSED NEW FLATS ON THE SITE OF CHESTERFIELD HOUSE
The Exhibit referred to by Lord Justice Romer

having regard to the small amount of damage sustained by the plaintiff in respect of that addition, which certainly is a matter which could be compensated in damages, to grant a mandatory injunction as regards the wing.

For these reasons, in addition to those which have been given by the Master of the Rolls, I am of opinion that this appeal fails on the main point, but succeeds upon the question of an injunction or damages.

LORD JUSTICE MAUGHAM: I should like to observe in the first place that I think a mandatory injunction, except in very exceptional circumstances, ought to be granted in such terms that the person against whom it is granted ought to know exactly what he has to do. I can quite understand that it is impossible in many cases to let the defendant know how far he can go or to do more than restrain a man continuing with his building. But when the defendant in an action is going to be ordered by the Court to take active steps with regard to something to be done on his own premises, I think certainly the better course is and, in my belief, the general course adopted in both Divisions of the High Court, has been to tell the defendant precisely what he is bound to do. That, however, is by the way, and I mention it because I think the defendants here had, as was pointed out, some occasion for complaining of the form of the Order, apart from the question of substance. . . .

In my opinion there could be no question as to what the test is, though a great deal may be said as to how you apply the test and as to what the test involves. Since the case of *Colls v. Home and Colonial Stores*, in 1904 Appeal Cases, page 179, it has been decided that the proper test is the test which existed before the Prescription Act was passed, or, in other words, whether the building of the defendant will cause such an obstruction of light as to amount to an interference with the ordinary occupations of life, which is the same thing as what is required for the ordinary purposes of inhabitancy or business according to the ordinary notions of mankind. It should be added that, in answering that question, you may pay regard, as you must pay regard in the ordinary case of alleged nuisance owing to noise and vibration, to the locality in a wide sense.

If the plaintiff has lived for 20 years in a clearing in the forest of buildings in either Mayfair or in the City, I am of opinion that it is no answer to him to say that his neighbours, or people in the locality, either because they have consented, perhaps for a consideration, or because their premises have been built by landlords who own houses on both sides of the street, or for any other reason, have come to be so situated that the premises opposite obstruct so much light that the ground floors of the premises are exceedingly inconvenient, and that the conditions possibly amount to a nuisance, using the word in the artificial sense in which it is used in this connection. To my mind it is far better to keep to what was decided by the House of Lords in *Colls'* case, or to the directions to juries upon which the House of Lords laid such stress, and to ask oneself the questions which they suggested should be asked, not, I agree, entirely omitting the locality, but not placing such hard and fast reliance upon the enjoyment of light by other people in the locality as has been suggested on behalf of the appellant here. It has to be remembered, however, that this point is, I think, of importance in regard to the question of remedy, that the original buildings on the defendants' property were very low, and that the plaintiff enjoyed in respect of his ground floor windows, to take them only for the present purposes, an exceptional degree of light before the demolition of the defendants' building. The angle from the sill of the plaintiff's ground floor windows to the obstructing point of the main part of the old building was 27 deg. Accordingly, there were 63 deg. of unobstructed light. If you looked at the stables of the old buildings, the angle from the plaintiff's ground floor windows to the obstructing point was as little as 24½ deg. Another thing which has to be considered to some extent in weighing evidence such as has been given by the plaintiff himself is that when the demolition of certain buildings takes places in order to erect some other building, there is a time when the access of light to the plaintiff's property is almost unobstructed, and accordingly people in that position are a little bit tempted to exaggerate the injury that they are going to suffer as the defendants' buildings actually go up. The comparison in their mind sometimes, at any rate, is between what happened when there was no building, and the obstruction day by day and week by week as the erection proceeds. The proposed new building does not, I think it must be admitted, cause anything like the serious obstruction which all of us who are acquainted with light cases have often found to be involved in those cases. It is argued on behalf of the defendants that an average amount of light over 45 deg. unobstructed will remain, taking into consideration the whole ridge of the main proposed building and taking into consideration the projected wing. It is agreed that at the projecting wing an obstruction of more than 45 deg. is caused, but it is contended that on the whole ridge of the main proposed building 45 deg. is left to the plaintiff, and that, as I understand what was argued in the Court below, was the main point upon which this case, so far as that part of it is concerned, was fought.

I want to make one observation with regard to the daylight plans upon which the plaintiff relied in this case. I think the so-called daylight plans are exceedingly useful as showing the Court what amount of obstruction will be caused by the proposed building, and for my part I think they have been very useful in this case. I think also that sections showing the angle of light which will be obstructed by the proposed building as compared with the light which was previously enjoyed and as compared with the light which the plaintiff might reasonably expect to enjoy, are of great use. But I do not think myself that either daylight plans or sections or angles, or anything like that, can be regarded as in any way conclusive in such a case. I think that so many surrounding circumstances have to be considered, including, of course, the element of locality and including the question as to whether the plaintiff's premises are situated in town or country, that no hard and fast mathematical standards can be applied, and I think the House of Lords clearly so decided in the case of *Colls*. The Court of Appeal must have clearly decided it in the case of *Kine v. Jolly*, and the House of Lords, when *Kine v. Jolly* came to them, never attempted for one moment to restore or to apply the hard and fast mathematical test of an angle of 45 deg. I think myself that the learned judge who heard the evidence has not misdirected himself on this part of the case at all. He has taken a perfectly correct view as to the weight to be attached in the particular case to the angle of 45 deg. In my opinion it is impossible for this Court to avoid coming to the same conclusion of fact as that to which he has come, namely, that some, at any rate, of the windows of the plaintiff's house, either one or more of the windows in rooms numbers 1, 3, 4 and 6, have suffered or will suffer an actionable injury by reason of the defendants' proposed building in this sense, that there will be left to some or one of those windows an amount of light such as that the enjoyment of the rooms lit by those windows, within the meaning of the phrase as used in the House of Lords, will suffer an actionable nuisance.

Referring to the conclusion of the plaintiff's witnesses that it was necessary for a room to have half its area above the "Semon" grumble point in order to be adequately lit, his Lordship said:

I should add one thing more with regard to the daylight plans, and that is that they may, I think, often be exceedingly misleading if the so-called 50-50 rule with regard to the amount of light which the rooms should enjoy is applied to a room which has any unusual depth in it, or applied to a room where the windows are in any sense unusual, because the light falling at table height from the window at a particular part of the room depends directly upon the depth of the room and the height of the window, and obviously those things have got to be carefully considered in applying the rule.

With regard to the appropriate remedy, his Lordship, after citing authorities as to nuisance, including vibration, said:

But in a light case you have a totally different state of things. Take the room where the plaintiff lives here. It cannot be alleged to be uninhabitable now, as the plaintiff could have said his room was in *Shelfer's* case. That is proved, among other things, by the fact upon which I think Mr. Greene was entitled to rely for this purpose, that many other ground floor rooms in the locality all over Mayfair will have less light than this room will have when the defendants' premises are completed. The test of nuisance in the case of a light obstruction involves a kind of average based upon the daylight hours during which light comes through the aperture alleged to possess an easement throughout the year. Everybody knows what an enormous difference there is between dawn and midday, but not everybody knows, I think, how enormous the difference is in the light coming through a particular aperture between December and June. It is within the mark, I think, to say that at least five times as much light comes to an ordinary house in June, all other things being equal, as in December, and the effect of an obstruction is not to render a room left with 45 deg. of light uninhabitable, though no doubt it means that a little more artificial light will be used after the obstruction is erected. If I may give an example to show clearly what I mean in this case, I should imagine that if we take an average day as being, say, about 14 April, it may be that the plaintiff will find that on the 14 April in a particular year he will have only as much light as he would have enjoyed in the old days when Chesterfield House was up, about a fortnight earlier. That is the sort of injury which a plaintiff suffers in such a case as this, and in June and July the possibility is that he will have partly to draw his curtains because he will be getting too much light in his room for the ordinary, convenient enjoyment of it. Then I ask myself whether in *Shelfer's* case the same rule would have been applied or suggested by Lord Justice A. L. Smith if it had been shown that the City of London Electric Lighting Company proposed to cause an injury for 10 days or perhaps a fortnight, and then not one which was of a very serious character. The injury caused by the obstruction of light is of the nature of a temporary nuisance during certain hours of the day. It does not follow from these considerations that the injury does not justify any relief in such a case as this. But the injury may be of a comparatively small character, very different from that which would be occasioned, for instance, if the main building proposed, instead of being 99 feet away, were merely 50 feet away.

After quoting the following passage from the judgment of Lord Justice Sargant in *Slack v. Leeds Industrial Co-operative Society*, 1924, 2 Ch., page 94,

"In my judgment there is still left a border line of cases with regard to the obstruction of light where the injury may be sufficiently substantial to justify some relief, and yet may be of so comparatively small a character as to be properly and adequately compensated by damages," his Lordship concluded: That phrase precisely represents the view which, after very careful consideration, I have formed with regard to the facts in the present case, and accordingly I agree with my learned brethren in thinking that there must be here an enquiry as to damages in lieu of an injunction, and in other respects I fully concur with what they have said.

The Kyles of Bute

Review of Construction and Materials

This series is compiled from all sources contributing technical information of use to architects. These sources are principally the many research bodies, both official and industrial, individual experts and the R.I.B.A. Science Standing Committee. Every effort is made to ensure that the information given shall be as accurate and authoritative as possible. Questions are invited from readers on matters covered by this section; they should be addressed to the Technical Editor. The following are addresses and telephone numbers which are likely to be of use to those members seeking technical information. There are many other bodies dealing with specialised branches of research whose addresses can be obtained from the Technical Editor. We would remind readers that these bodies exist for the service of Architects and the Building Industry and are always pleased to answer enquiries.

The Director, The Building Research Station, Garston, Nr. Watford, Herts. Telegrams: "Research Phone Watford." Office hours, 9.30 to 5.30. Saturdays 9 to 12.30.

The Director, The Forest Products Research Laboratory, Princes Risborough, Bucks. Telephone: Princes Risborough 101. Telegrams: "Timberlab Princes Risborough." Office hours, 9.15 to 5.30. Saturdays 9.15 to 12.

The Director, The British Standards Institution, 28 Victoria Street, London, S.W.1. Telephone: Victoria 3127 and 3128. Telegrams: "Standards Sowest London." Office hours, 9.30 to 5. Saturdays 9.30 to 12.30.

The Technical Manager, The Building Centre Ltd., 158, New Bond Street, London, W.1. Telephone: Regent 2701, 2705. Office hours, 10 to 6. Saturdays 10 to 1.

DESIGN AND CONSTRUCTION OF TENEMENTS

The following is a review of the *Construction of Flats for the Working Classes*,* an interim report of the Ministry of Health Departmental Committee which is investigating technical problems in connection with the Government's slum clearance and rehousing campaign. The Committee consists of architects, engineers and other technical experts, and is under the chairmanship of Sir George W. Humphreys, K.B.E., M.Inst.C.E. The architect members are Mr. H. V. Ashley [*F.*], Mr. G. Topham Forrest [*F.*], Mr. Ian B. Hamilton [*A.*], Mr. L. H. Keay [*F.*], Mr. Francis Lorne [*F.*], Mr. Stanley C. Ramsey [*F.*], Mr. A. Scott [*F.*], and Mr. John Wilson [*F.*]. The engineer members are Dr. Oscar Faber, Mr. B. L. Hurst, Mr. J. A. Macintyre, Mr. R. Travers Morgan, and Mr. W. L. Scott. Dr. R. E. Stradling, Director of the Building Research Station, is also a member, and the secretary is Mr. A. Zaiman.

In the course of its work the Committee found it necessary to divide up its membership into several sub-committees, to which other persons with special technical knowledge were appointed. These sub-committees numbered seven and considered the following subjects: Accommodation and Planning; Acoustics; Equipment; Fire Resistance; Habitability; Structure; Materials. It can be said that never before in this country has a particular type of building been subjected to such close and expert study. The interim report makes clear that the work is being tackled with both vision and thoroughness; the succeeding, or final, reports will be awaited with great interest.

THE EXTENT OF THE PROBLEM

It is clear that a great deal of fundamental research, both technical and purely scientific, remains to be done. For example, the problem of noise transmission awaits the results of the tests at present being carried out by the Architectural Acoustics Committee of the D.S.I.R. Again, the desirable standard of fire resistance is considered to be Grade D of British Standard Specification No. 476, but no one can yet specify structure wholly and in detail to give that standard and no more; for this the large-scale experiments in the new laboratory of the Fire Offices Committee must be awaited. Nevertheless, some of the immediate conclusions of the interim report will be of value in the solution of current problems of tenement construction, but its real value lies in the outlining, for the first time in the history of building, of a truly scientific study of a building problem considered as a whole.

Much has been said in recent years of the change from empirical to scientific methods which the building industry is undergoing. Hitherto, about the only evidence of that change has been in the increasing part paid by the laboratory in the manufacture of materials. Never before have the major problems, such as habitability, cost (both first cost and maintenance), structure, materials, fire resistance and equipment, been analysed and discussed on a scientific basis, both individually and in their relation to one another.

PRELIMINARY INVESTIGATIONS

One of the first steps taken was the examination and comparison of typical blocks of flats erected in London, Liverpool, Glasgow, and other cities of Great Britain. The responsible authorities supplied drawings, specifications, quantities and figures of actual cost, and these were submitted to the Building Research Station for analysis. Much of the practical recommendations discussed below have been based on these schemes.

Continental schemes have also been examined, partly from material for a forthcoming book obtained by the Building Centre. The Committee give as their opinion that the often-stated belief that many Continental schemes are superior to those in this country is exaggerated. "They are more liberally provided with external amenities than in the average English scheme . . . but their interior planning and accommodation are by no means superior to ours." They also note that, apart from some interesting structural experiments, the practice on the Continent is to follow traditional brick construction.

The Committee have decided to concentrate first on flats of five floors, leaving taller buildings for a later investigation. As a means of examining costs they have designed a typical scheme of 60 flats which is readily adaptable to all forms of construction. The design is not to be regarded as a type plan, but is merely a basis for obtaining comparative estimates of cost of different types of structure. It has been issued to certain contractors and specialist firms who are supplying tenders on it.

Perhaps the greatest difficulty lies in the measurement of efficiency—the establishment of standards and the relating of the various qualities of materials to them. This is particularly difficult in the case of "habitability," which the Committee

* H.M. Stationery Office. Price 9d.

hold to be an overriding consideration. As an example of the efforts to establish standards of efficiency for a material, floors and flooring are discussed at some length. The properties of floor finishes for which such standards have to be established are resistance to abrasion; non-hardness, in the sense of comfort to occupants; warmth, again in the sense of comfort to occupants; quietness to the tread; non-slipperiness; constancy of volume (*i.e.*, freedom from cracking due to temperature and moisture movement); durability; continuity, in the sense of being jointless; chemical composition compatible with sub-floor materials (*i.e.*, non-corrosion of metals); sound absorption, coupled with sound transmission; ease of cleaning. Closely allied are the properties of the structural floor. These are strength, fire resistance, resistance to sound transmission, durability. The foregoing will serve both to show the thorough way in which the problem is being tackled and the large amount of work still before the Committee.

COST

Investigation into costs forms the major part of the Committee's reference. They point out, however, that comparisons or the establishment of some sort of standard price are next to impossible; such matters as the wage rates, availability and quality of labour, the employment of specialist firms, the supply of materials and the character of the site will all tend to cause local variations. The size of the scheme is also of moment as regards price per unit.

The methods of comparing costs receive attention and the three commonly used—namely, price per cubic foot, per square foot of floor area and per habitable room are discussed. The prices for six representative schemes are given under these heads, all special and site costs being excluded as far as possible. The comparisons are a little surprising, the costs per habitable room bearing very little relation to the two others but, as might be expected, being more allied to the average number of rooms per flat. Even then two schemes cubing at 1*s.* and 1*s.* 1*d.* with approximately the same number of rooms per flat have costs per habitable room of £110 10*s.* and £94 respectively. The prices per cubic foot vary from 6½*d.* to 1*s.* 1½*d.* and the costs per habitable room from £76 to £142. The figures indicate how difficult it is to discover whether a particular scheme can be considered as an economical one or not. For example, the designer of the first scheme quoted in the Report may claim that his scheme at 6½*d.* per cubic foot is a cheap one, the price per habitable room being £103. On the other hand, the designer of the second scheme may well argue that his cost of £76 per habitable room shows a better scheme than the first man's, though his cost per cubic foot is 8¾*d.*

The Committee propose to obtain a closer analysis of costs by considering structural items separately, dividing the building up into thirteen sections, such as foundations up to damp course, structural walling, floors, partitions, stairs, floor finishes, heating, etc.

Finally it is suggested that actual blocks of flats should be built, "if necessary as a frank experiment," in order that they may be fully studied in course of erection.

Research work on one type of building necessarily reflects on others. The need for an up-to-date textbook on building science is emphasised in the Report. It is suggested that the Building Research Station should issue a series of pamphlets dealing with different materials and elements of construction.*

* This work is at present being undertaken by the Building Research Station at the joint request of the R.I.B.A. and the Chartered Surveyors' Institution.—EDITOR.

GENERAL NOTES ON CONSTRUCTION

"Conventional brick construction has established itself very firmly. The possibilities it offers are familiar and it is easily adaptable to requirements."

In steel-framed structures the concrete casing to the members, applied as protection against fire and corrosion, is relatively costly and gives scope for economy. In fire resistance to obtain Grade D (1 hour) protection it is suggested that it is sufficient if external columns are built into the walls, the inner faces and interior columns being protected by plaster on metal lathing fixed clear of the steel. The newer form of reinforced concrete flat slab construction in which the cross walls are the structural members is considered to offer a promising line of development. A special difficulty of new systems, involving patents or specialist engineers or workmen, is pointed out. The problem of facing reinforced concrete structures to prevent rain penetration, to give good appearance and low maintenance cost, is suggested as having a solution in the development of cheap and thin facing slabs that can be used as formwork.

Sound Resistance.—It is stated that researches tend to emphasise the value of the "mass-law," that is, that resistance to sound transmission in a partition or floor varies with its weight. The Committee appear inclined to regard the 8½ inch brick wall, plastered both sides, as giving a desirable standard for sound resistance between flats. The operation of the "mass-law" is shown by the case of a 7 inch reinforced concrete party wall, one side of which is faced with fibre boards, which is said to have as good sound resistance as the brick wall quoted as standard; that is to say, weight rather than thickness is the important factor.

Sound is freely transmitted laterally in floor structures. Therefore separation of flats by sound resisting (usually double) partitions resting on a continuous floor structure may be ineffective. Breaks in the floor system at dividing walls are indicated, or, alternatively, the use of suspended ceilings. The most important objective, however, is to prevent the transmission of impact noises by suitable cushioning in the floor structure.

Structural Floors.—Typical floor structures in tenement buildings are examined in the Report and there is an interesting discussion on timber floors. For centuries past joisted floors have been invariably used in blocks of flats in Scotland and their record in the matter of fires is a good one. Bearing in mind that a Grade D fire-resistance (1 hour) is the standard aimed at, the use of joisted floors therefore seems worth consideration in new schemes. Gypsum plaster has a good degree of fire resistance, specially when on metal lathing, which gives it both a cross reinforcement against temperature stresses and physical rigidity. In Scotland a "deafening" of ashes between joists is usually added and may assist in the matter of fire resistance. Full scale fire tests will be the determining factor in their adoption.

Vermin.—The serious character of bed-bug infestation is referred to and three proposals are made: that incoming tenants should be disinfested; that precautions should be taken to prevent the creation of cavities which will harbour bed-bugs (these follow the lines laid down in the Ministry of Health's report on Bed-bugs†); that the use of wallpaper in bedrooms be discouraged. It is also recommended that cupboards and fittings be made so that they are easily removable.

Balconies.—A solid parapet for access balconies is commended on the grounds that in fires it protects escaping

† See R.I.B.A. JOURNAL, 7 July 1934, pp. 873–874 and 880–881.

persons from the effect of flame or hot gases coming from the windows below. Where private balconies are provided abutting on one another in pairs, the provision of a locked door between them, with the key in a glazed box, will afford an alternative means of escape. Incidentally, the report makes a useful distinction by speaking of access *galleries* and private *balconies*.

Roofs.—No recommendations are made in the matter of pitched *versus* flat roofs. In the former, economies in timber scantlings would seem to be indicated in many cases, coupled with the use of large interlocking day tiles as affording reduction in weight. With the best types of the latter both boarding and felting may be omitted. A continuous roof space is said to give a rapid means of fire spread, though it does not affect escape.

The principal trouble of flat roofs, namely movements due to temperature and moisture variations, is discussed. This is said to be of less account in framed buildings than in those of solid walls. Adequate reinforcement should guard against troubles from moisture movement, and to promote heat insulation a white reflecting surface is stated to be the most effective means. Insulating material incorporated in the roof slabs can give insulation comparable to that of a pitched roof.

Heating and ventilation.—The number of structural fires caused by the use of open fireplaces give ground for consideration of the use of central heating, in addition to the economy both in the considerable saving of flues and chimneys and possibly in running costs. "On the other hand, the open fire is adjustable to different needs; it can be used for burning rubbish and can be auxiliary to a cooking oven and to a boiler for the supply of domestic hot water. It provides a focal point for the occupants of the room. As a compromise, it may be worth while having central heating and hot water supply whilst still having a fire in the living-room if costs permit." Continuous heating by gas or electric fires is stated to be very expensive.

Building Research Station experiments have found that a wall ventilator is as effective in changing air as the flue of an unlit fireplace. On the other hand, the wall ventilator occasionally causes uncomfortable draughts and is consequently often papered over or stuffed with rags. The most promising line of research appears to lie in designing an efficient ventilator.

Building Byelaws.—The Committee have quite clearly realised the hampering effects of our existing muddled system of byelaw control. While avoiding any revolutionary suggestions they strongly recommend that any material or process reported on favourably by the Building Research Station should be notified to local authorities as one "coming into the category of suitable alternatives to those of conventional sanction." It is to be hoped that this is the thin end of a large and vigorously driven wedge.

POLISHED FLOORS

There are certain types of floor which must be kept polished either for preservation or appearance. The risk of accidents from persons slipping on such polished surfaces is considerable, and the building owner may well be held liable at law for injury arising from such accidents.

Unfortunately all wax polishes, whether of the ordinary types dissolved in turpentine or the newer emulsified types, are slippery in some degree. Slipperiness with these polishes can be wholly overcome by the addition of resin, but this tends to make the polish so sticky that it cannot be easily spread; even after considerable hard work in spreading, the surface is liable to look greasy and dull.

A better method is to dust with finely powdered resin a floor already wax-polished. The appearance of a floor so treated is not so good as with the plain wax polish and the resin makes difficult subsequent repolishing. The treatment may, however, be worth while in public buildings and institutions on special occasions when heavy foot traffic is anticipated.

Care should be taken that too thick a layer of polish is not applied to wood or linoleum floors adjacent to a stair of marble or terrazzo. The wax is liable to be carried by foot traffic from the floor and deposited on the stair, forming a dangerously slippery surface. The wax may even fill the pores of non-slip materials used as nosings and render them useless.

An unpolished hardwood floor is not often seen nowadays since it demands more labour to keep in presentable condition than does a polished one. The wooden-surfaced decks of the older warships are rubbed with a "holy-stone" (a soft sandstone) and water and the process gives a clean-looking surface in which the grain of the wood is exposed. In the older workhouses oak floors were scrubbed, soda being added to the water, thereby bleaching the oak. Where labour for scrubbing is easily obtainable, an unpolished hardwood floor is worth considering and naturally it is non-slipping.

In all public buildings it is desirable to aim at even non-slip qualities in the floors throughout. Danger from slipping often exists because of changes in floor material, as, for example, at the feet of stairs or on landings. Such changes as those from rubber flooring to marble, polished wood or terrazzo are liable to give rise to accidents; this is particularly important at staircases because of the risk of falling down a flight.

A common source of danger is the small rug or carpet placed in the middle of a polished floor. These should always be pinned down if possible; where this is not possible, either because the rug is valuable or its position liable to alteration, a good alternative is to place a sheet of crêpe rubber under the rug. This can now be obtained in the form of a rubber-impregnated coarse embroidery canvas. Alternatively sheet crêpe rubber is sold by the chain stores. It is not necessary to cover the whole area of the rug; a piece about one foot square placed under each corner and in the middle of long sides will effectively prevent movement. It is sufficient to place it between the carpet and the floor without fixing to either, but the rubber is less liable to be misplaced if it is sewn to the underside of the carpet.

A form of press-stud—a larger version of that used for fastening gloves—is often used and is serviceable. It has the disadvantage that should the rug stretch, the studs will not register, and also, if the rug is taken up, the projecting portion of the stud may be damaged.

The above article is from notes contributed by the Building Centre.

Book Reviews

OFFICIAL ARCHITECTURE, SOCIAL SERVICE AND DESIGN *

The Report of The Miners' Welfare Committee for 1934

THE Miners' Welfare Committee is one of the most remarkable social services of our time. Everything it does is touched with common sense and humanity in a way that would be remarkable in an organisation entirely free from the influences that hedge about the activity of Government departments. Such virtues in a Government department are almost beyond belief. Its architecture, characteristic of the whole work of the Committee, is almost entirely free from pedantries either of the Corinthian column type, which thinks that industrial buildings can be "humanised" by a bit of classical architecture on the outside, or of the "no-nonsense-about-this" type, which thinks that because the buildings with which the Committee are concerned are industrial they need to be nothing more than engineering structures.

The Report for 1934 is a most convincing statement of the success of the Committee's work and, from our point of view in particular, of the Committee's architecture.

The majority of the building work done by the Committee is in the provision of pithead baths. During seven years' working the architectural staff have been responsible for constructional work worth over 3¼ million pounds. One hundred and fifty-four baths have been built with accommodation for 200,674 men and 262 women. In addition there has been considerable building of sports pavilions, village halls and recreation grounds, the latter generally made by the labour of the miners themselves. The money to provide this vast social service is contributed by all the persons directly concerned—the Government, the mine owners and the miners, who pay a weekly contribution towards maintenance, varying from twopence to one shilling a week. As a social fact it is deplorable that the labour of the industry should have had to wait so long for these essential services that they can only be given now, in most cases, by Government pressure. If the owners had realised, as the Welfare Committee know, that health, happiness and efficiency go together and that they pay, all the mines in the country would have had their baths years ago. But we need not grumble because if they had been given baths in the past it is certain that they would not have been so good as those now provided for the Welfare Committee by Mr. Forshaw, the chief architect, and his excellent staff.

Having mentioned Mr. Forshaw, we can appropriately break off for a moment to mention one of the most remarkable features of the constitution of the architectural department of the Committee. There is a lot of talk, much of it acrimonious, much of it unintelligent and unnecessary, about the employment and status of official architects. The Miners' Welfare Committee must be the official architect's Elysium. Not only is the general direction of the department in such excellent hands that, as we have said, common sense and humanity pervade all that it does, but the work which the department is doing is all of a character which must commend itself tremendously to every lively young architect with a sense of his social responsibility to the State. Here is architecture which genuinely comes within the terms of "vocation" and not merely "profession." Nor is this all. At the most such generalities are subjective. Under Mr. Forshaw's direction, the architectural department almost goes out of its way to encourage individual responsibility and pride in work and to give credit where credit is due. The fact that each building is attributed to its responsible architect is still too rare to pass without comment; but this report carries the same sweet reasonableness a stage farther, for not only is the name given of the artist of each perspective drawing printed in the report but even such an attribute of skill as "R.I.B.A. Grissell Gold Medallist, 1935," is added after the name of one draughtsman.

Probably there is not a single other public authority in the country, or private firm, so prepared to honour the qualifications of its employees. The quality of work which results is the best testimony to the success of such treatment. As with baths for miners, credit for architects definitely pays.

Behind all this the influence of the chief architect speaks for itself in the social and architectural quality of the work, which all is recognisable as coming from one source. The functionalist might say this is merely because it is all designed to solve the same problem; actually the influence of personality on design at the production end is as great as the influence of function at the consumer end.

In addition to the photographs and drawings of the buildings from the 1934 programme of work the report includes an excellent section on the costs and planning of pithead baths, with a number of very apposite comments on the social problems involved. We must again refer to the rare humanity which pervades the work of this Committee. We can't get away from it! The writer of the report could so easily have given a dry efficient description of work done and left out half the things which make the report very much more than

* *Miners' Welfare Fund, 1934. The 13th Annual Report of the Miners' Welfare Committee for the Year 1934.* London: H.M.S.O. 1935. 1s. 6d.

is called for by officialdom. It is, to anyone who reads between the lines, one of the most vivid expositions of the architect's method that we have ever come across. The architects of the Committee are seen as sociologists, economists, constructors, planners and artists with all their attainments directed to the solution of a single urgent problem.

The extent to which architectural problems are dependent on sociological study is shown by one small detail from the report where it states that the Committee has found that in small mines they can do without separate washing cubicles in the bath because "the same degree of privacy is not asked for in small installations as in some large one. Possibly this is because the former tends to assume the character of a club rather than a public institution."

This may not seem a very elaborate point, but it is probably true that nine out of ten people would have missed it.

"Well arranged and well kept surface buildings, apart from their effect on operating efficiency, arouse a psychological response in the miner resulting from improved environment at the place of work. The work appears less burdensome and some improvement in the life's occupation of the miner is effected." This paragraph represents two-thirds of the meaning of industrial architecture, a meaning which was completely hidden from the nineteenth-century industrialist, and is still hidden from many to-day. Half of the factories in England which have all the pretensions of architecture have, in fact, nothing more of architecture than is necessary to give a façade with "selling value" on the street. The social reason as it affects the employees is as completely disregarded as ever.

After quoting various speeches made at the R.I.B.A. Centenary by the Prince of Wales and Sir Giles Gilbert Scott, the report says: "These remarks are an encouragement to us to continue our policy of using our influence towards the improvement of the working conditions and environment of the workers of the mining industry, and we hope for increasing co-operation from colliery companies." If the writer of the report was not so modest he might claim with justification that the work of his department is the kind of thing which gives the words of Presidents and Princes meaning by showing that big ideas and social spirit can be applied. If it was not for the practical demonstration no amount of theorising could stand for a moment. We need hardly add here that Sir Giles Scott has shown himself as one of the architects who know how to design industrial buildings with an eye both on industry and humanity.

The temptation with this report is to quote the whole. There is not a paragraph in the part dealing with the buildings which is not full of wisdom. This, for instance: "The intensification of the demand for more hygienic conditions has resulted in a new approach to the problem of design and construction and in the employment of new materials. This advance is reflected in some of the work of our architects, which has attracted occasional criticism because the new or unusual is apt to convey an impression of expensiveness or extravagance. But the modern trend is toward obtaining effect by line and proportion instead of ornament, towards simplicity of design that makes for inexpensiveness—Good design is not a luxury either in a building or in a fitting." We have quoted parts of the report dealing with generalities rather than points of detail chiefly because they are more quotable, but the report is far from being merely a plethora of pious generalities, however true they may be. It is full of facts and figures of the Committee's work which all speak of intelligence in high quarters and of a hopeful future.

The architects of the baths illustrated are Messrs. J. A. Dempster [*A.*], F. G. Frizzell [*A.*], C. G. Kemp [*A.*], A. J. Saise [*A.*], W. M. Naylor [*L.*], W. A. Woodland [*L.*]; and of other buildings Messrs. E. D. Jones [*F.*], R. W. Parker, R. A. P. Pinckney [*L.*], J. Vaughan Richards [*L.*], and M. T. Seymour [*L.*].

PLANNED INFORMATION*

The manufacture of proprietary building materials has increased so rapidly during the past twenty years that every book on building construction (once the architect's chief source of information) is substantially out of date before it is published. In addition, we now have a vast array of complete units of equipment, for refrigeration, heating, ventilation, cooking, cleaning, washing, refuse disposal, communication, vertical transport, etc., which a competent designer may use with advantage. This multiplication of elements has developed while economic conditions have actually reduced the volume of those portions of a building which normally house them, making a detailed knowledge of each element an important part of the architect's equipment in design. The nineteenth-century kitchen, for example, was a large apartment and was surrounded by stores and larders, scullery, washhouse and cellars, in which the pots and pans and brushes could be scattered. This part of the present-day house is frequently reduced to a single room, less in area than the old kitchen alone, and housing more labour-saving devices than all the labour-using odds and ends of old. The designer therefore must supplement his imaginative powers with a mass of technical information, with accurate dimensions, the number and sizes of pipes and wires and conduits required, if he is to achieve economically an ordered architecture. And he must

* *The Architects' Journal Library of Planned Information—Volume 1.* Edited by Sir John Burnet, Tait and Lorne. London: The Architectural Press. 1935. 21s.

acquire this technical information in a simple and convenient way if he is to avoid submerging his gift of imaginative design in the process.

Following closely upon the Information Book of Sir John Burnet, Tait and Lorne, we now have Volume One of the *Architects' Journal Library of Planned Information*, an excellent production. Its scope is wide and includes such useful office short cuts as check lists for drawings, cube cost graphs, mensuration formulæ, etc., and continues through sheets of useful information on general building practice to a large number of information sheets dealing with proprietary materials. In addition, there are many sheets devoted to planning; a series on housing, cinema and restaurant seating, hotel bedroom units, and so on.

The book works well in practice. It would work even better (*a*) if the sheets devoted to one subject were grouped together (it is annoying, for example, to have to return to the index six times to exhaust the sheets on housing, or to find the second sheet on floor loads three pages away from the first); (*b*) if all dimensions of fittings were invariably given (*e.g.*, the height of a vacuum cleaner is given, but not the width); (*c*), if blank spaces could be left so that variable sizes (*e.g.*, car sizes) could be brought up to date from time to time, and (*d*), if the binding edge of the sheets could be coloured so that the Information Library could be readily distinguished from the many other volumes which nowadays use the convenient spiral wire binding. But these, after all, are only minor criticisms—the great thing is that the beginnings of a library of Planned Information are now available to architects.

L. T. W.

COMMERCE AND ARCHITECTURE IN SWEDEN

SWEDISH CO-OPERATIVE WHOLESALE SOCIETY'S ARCHITECTURAL OFFICE, 1928–1935. *Swedish Co-operative Wholesale Society's Publishing Dept., Stockholm. 1933. Price 10s.*

The expansion of the co-operative movement has been one of the most important features in the social and economic life of Sweden during the last twenty-five years. Under the guidance of the Central Union of Social Labour the principles of co-operation have penetrated all classes of the people, and are naturally especially popular with the wage earners of the industrial areas. The Co-operative Housing Societies have provided good flats in the larger towns, notably at Södermalm, the working-class quarter of Stockholm, which have reduced overcrowding without resorting to public loans. At the same time the Small Cottage movement adopted by the municipalities of Stockholm and Gothenburg has provided garden suburbs for town workers without adding an öre to the rates.

This book deals with another aspect of the co-operative system more familiar to us in this country, whereby members can obtain foodstuffs and the necessities of life in the cheapest manner. There are to-day about 750 of these organisations with a membership of over half a million, and in an endeavour still further to rationalise their activities they have formed a central organisation with headquarters in Stockholm for the purchase, manufacture and wholesale distribution of goods to various parts of the country.

This central office has turned its attention to the standardisation of the shops throughout the movement, and ten years ago the architectural department was opened under Herr Eskil Sundahl and a staff of architects who were to be responsible for producing designs of up-to-date hygienic premises suitable for co-operative depots. The department also has charge of the design and erection of the various warehouses, factories and welfare accommodation of the central organisation and its thirteen subsidiary sales districts, as well as having schemes and recreational buildings for the workers.

This illustrated record of ten years' work is almost wholly composed of photographs (some in colour) of exteriors and interiors of the co-operative buildings. It is well furnished with plans and sections, and as a compliment to this country an edition has been published with the text in English—a compliment we might more frequently return in the hope of making British work better known abroad.

Although standardisation has played an important part in the design of fittings and general planning, it has not produced a soulless uniformity. Good architectural manners have everywhere been observed in old towns such as Sigtuna and Halmstad, and in country districts the employment of traditional methods has resulted in shops of unostentatious types pleasant to look at, and in striking contrast to the depots of some multiple stores in this country.

Of the larger schemes Kvarnholm Mills are typical of a well-planned lay-out including grain silos, macaroni and crisp bread factories and a housing settlement. Most of the buildings are of concrete and glass construction conforming to the modern factory type, but there is one unusual example. This is a covered tennis court roofed with a segmental arch springing from low walls behind the courts, having the maximum height above the net, and lit by clerestory windows at the sides.

The Konsumhus in Stockholm, built in 1930–32, houses the head offices of the Wholesale Co-operative Society and includes a coffee-roasting plant (an important industry, as the Swedes are one of the largest coffee consuming nations in Europe) in which the pipe conveyors of the different kinds of coffee each have their own distinctive colour. There are also illustrations of the well-equipped meat store and the railway loading dock with vertical sliding partitions. Another factory, the Luma, built in ideal surroundings, has an economic as well as an architectural interest. This industry was started to fight the International Lamp Trust in an endeavour to lower the price of electric bulbs to the consumer.

Among the examples of shop fittings that at No. 16 Drottningatan in Stockholm, opened in November 1934, is very pleasing. The butcher's shop at Oluvslund shows a more hygienic type of glass fitting than is common in this country. English fish and butchers' shops, open to flies and dust from the street, make a bad impression on Swedish visitors.

A final section of the book illustrates lighting fittings, glassware, wrappings and labels all showing once again the truth of the Swedish claim that bulk-produced articles can be pleasing if only they are well designed in the first place.

LL. E. WILLIAMS [*A.*]

Accessions to the Library

1934–1935—VIII

INCORPORATING NOTES ON RECENT PURCHASES

(*These Notes are published without prejudice to a further and more detailed criticism.*)

Lists of all books, pamphlets, drawings and photographs presented to, or purchased by, the Library are published periodically. It is suggested that members who wish to be in close touch with the development of the Library should make a point of retaining these lists for reference.

Books presented by Publisher or Author marked R.
Books purchased marked P.
* *Books of which one copy at least is in the Loan Library.*

ARCHITECTURE

History

SARTORIS (ALBERTO)
Gli Elementi dell' architettura funzionale.
2nd ed. 10¾″ × 8¾″. (viii) + 584 pp. (mostly illus.). Milan: Hoepli. 1935. (£3 10s.) P.

Drawing

GORDON (J. W.)
Photographic perspective and parallacter mounting.
priv. prin. pam. 8″. Lond.: the author (113 Broadhurst Gardens, N.W.6). 1933. R.

Professional Practice

LONDON COUNTY COUNCIL
*[Building Act.] Report of the Advisory Committee on the amendment of the London Building Act, 1930. (No. 3115.)
12″. Lond. 1935. 4s. P. (2)

ARCHITECTS' REGISTRATION COUNCIL
Register of registered architects.
Volume Two. 31st December 1934. 9¾″ × 7¼″. Lond. [1935.]
2s. 6d. R.

ARCHITECTS' REGISTRATION BOARD OF VICTORIA
Copy of the register containing the names of all persons registered under the Architects Act, 1928, corrected to the 31st December 1934. pam. 11″ × 8½″. Melbourne. [1935.] R.

Building Types

(Civil)

EVANS (*Sir* ARTHUR)
The Palace of Minos . . . at Knossos.
Vol. iv: in 2 parts. 9¼″. Lond.: Macmillan. 1935.
£9 9s. the 2 parts. R.

SWEDISH COOPERATIVE WHOLESALE SOCIETY
Swedish Cooperative Wholesale Society's architects' office. [Works designed in that office.] 1925–1935.
11½″ × 8¼″. 148 pp. (mainly pls.). [Stockholm. 1935.] R.

THOMPSON (A. HAMILTON)
St. Mary's Guildhall, Lincoln. Popularly known as John of Gaunt's Stables. [With leaflet, appeal for preservation.]
pam. 9″. [Lincoln: Corpn.] 1935. R.

MORETTI (BRUNO)
Ospedali.
10¾″ × 8¾″. xlvii + 298 pp. Milan: Hoepli. 1935. (£2 5s.) P.

(Ecclesiastical)

FREEMAN (E. A.)
Remarks on the architecture of Llandaff Cathedral: *etc.*
8o. London. 1850. *Presented by Mr. P. G. L. Webb.*

(Educational)

OFFICE INTERNATIONAL DES MUSÉES
Mouseion. 8me année, vols. 25–26 (in one). Nos. 1–11—1934.
9¼″ × 7¼″. Paris: Int. Inst. of Intellectual Co-operation. 1934. P.

AMERICAN LIBRARY ASSOCIATION
*Manual of library economy:—
x. Elements of the library plan. By H. S. Hirshberg. 1930.
xi. Furniture, fixtures and equipment. By L. A. Eastman. Revised ed. 1927.
pams. 7¾″. Chicago: A.L.A. 10—.
Now purchased for Loan Library.

GODET (MARCEL)
La Bibliothèque Nationale Suisse. *&c.*
11¾″. (ii) + 42 pp. Berne: Bibliothèque Nationale. 1932.
(2.50 fr. Swiss.) P.

BERNE: BIBLIOTHÈQUE NATIONALE
*Die Schweizerische landesbibliothek in Bern.
11¾″. 57 pp. Bern: Bibl. Nat. [1931.] (5 fr. Swiss.) P.

YALE UNIVERSITY. *New Haven:* LIBRARY
*The Sterling Memorial Library. (Yale University Library Gazette. April.) 10¼″. New Haven, Conn. 1931. *Presented.*
A copy is now in Loan Library.

(Domestic)

NATIONAL HOUSING AND TOWN PLANNING COUNCIL
Memorandum upon the Housing Bill, 1935, the consolidation of housing accounts. By P. S. Phillips. pam. 13″. Lond. [1935.]

GREAT BRITAIN: PARLIAMENT—COMMITTEES. STANDING COMMITTEE A
Report on the Housing Bill with the proceedings, *etc.* (83.)
pam. 9¾″. Lond.: H.M.S.O. 1935. 1s. P.

MINISTRY OF HEALTH
Housing. House production, slum clearance, etc.. . . Statement showing . . . to . . . March, 1935, the number of houses, *etc.*
pam. 9¾″. Lond.: H.M.S.O. 1935. 3d. R.

COPENHAGEN: KUNSTAKADEMIET [ROYAL ACADEMY OF FINE ARTS]
Charlottenborg. Historie, opmaaling.
14¾″. (x) + 57 pp. + 60 pls., some double-leaf. Copenhagen. 1933.
With MS. leaf of congratulation on the R.I.B.A. Centenary. Specially bound copy. *Presented by the Academy.*

HEADLAM (CECIL) *and* HOME (GORDON)
The Inns of Court. Painted by G— H—, described by C— H—.
8¾″. viii + 211 pp. + 20 pls. + folding map. Lond.: A. & C. Black. 1909. 4s. (secondhand). P.

BELL (W. G.)
The Tower of London. (Historic buildings series.)
7¼″. 160 pp. + pls. Lond.: Duckworth. 1935. 3s. 6d. P.

MINISTRY OF AGRICULTURE AND FISHERIES
*The Construction of cow-houses. (Bulletin No. 40.)
2nd ed. reprint. pam. 9¾″. (2 plans in pocket.) Lond.: H.M.S.O. 1934. 6d. P. (2)

Societies

INCORPORATED CHURCH BUILDING SOCIETY
Annual Report. 117th, for 1934. 1935. R.
With usual accounts and illustrations of churches repaired and built.

COMMISSIONERS FOR THE EXHIBITION OF 1851
Report: Ninth [on 1911–Apl. 1935.] 1935
(Museum work, educational work at British Schools at Athens and Rome, *etc.* With plan of South Kensington estate.)

MANCHESTER: CITY ART GALLERIES
Annual report. 1934. [1935.]

NATIONAL HOUSING AND TOWN PLANNING COUNCIL
Annual report: 35th, for [1934–]35. 1935
(*Including*, in addition to its main topics:—
Davidson (T. G.). Objects and work of S.P.A.B.
Walker (C. H.). Dwellings for aged persons.
Purdom (C. B.). Garden cities of England.)

Details

LLOYD (NATHANIEL)
*A History of English brickwork. New and abridged ed. by Leslie Mansfield.
$11\frac{1}{4}'' \times 8\frac{3}{4}''$. xiv+77 pp.+cxl pls. (double). Lond.: H. Greville Montgomery. [1935.] 12s. 6d. R. & P.

ALLIED ARTS AND ARCHÆOLOGY

BRITISH COLOUR COUNCIL
The B— C— C— Dictionary of colour standards.
[Text:] A list of colour names referring to the colours shown in the companion volume.
[Folding card in cover.] (British Standards Institution: B.S.S. No. 543.)
—Both 9″, in case. Lond. 1934. £2 2s. the set. *Presented.*

WALPOLE SOCIETY
The Twenty-third volume . . . 1934–1935. The drawings and sketches of John Robert Cozens . . . by C. F. Bell and Thomas Girtin. $12\frac{3}{4}'' \times 10''$. Oxford: U.P. for the Society. 1935. £1 1s. P. (by subscription).

Societies

ASSOCIATED ARCHITECTURAL SOCIETIES (of Lincoln, *etc.*)
Reports and papers. Vol. xli, pt. ii [for] 1933. 1935.

CEYLON: ARCHÆOLOGICAL SURVEY OF CEYLON
Annual report . . . for 1934. (S. Paranavitana.) 1935.
[With plates.]

BUILDING SCIENCE

BURNET (*Sir* JOHN), TAIT *and* LORNE, *editors*
*The Architects' Journal Library of planned information. [Sheets 55–176, numbered on from previous series in A—J—, which were also published in B—, T— and L—'s Information book, 1933.]
Vol. i. $12\frac{1}{4}''$. Index, etc.+122 pls. Lond.: Archts.' Journal, 1935. £1 1s. P.

Structural Elements

BRITISH STANDARDS INSTITUTION
B.S.S. (No. 606) for plaited sash lines. 1935. 2s. R.

Materials

BRITISH STANDARDS INSTITUTION
British standards: No. 589. B.S. nomenclature of softwoods (including botanical species and sources of supply). 1935. 2s. R.

IMPERIAL INSTITUTE: ADVISORY COMMITTEE ON TIMBERS
*Grading rules and standard sizes for empire hardwoods.
pam. 10″. Lond. 1933. 1s.
Copy now added to Loan Library.

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH: BUILDING RESEARCH
Technical papers, contd. No. 16. The quaternary system . . . in relation to cement technology. By F. M. Lea and T. W. Parker.
pam. Lond.: H.M.S.O. 1935. 1s. R.

Construction

BRITISH STANDARDS INSTITUTION
B.S.S. (No. 602) for lead pipes for other than chemical purposes. 1935. 2s. R.
B.S.S. (No. 603) for lead pipes (B.N.F. Ternary alloy (No. 2)). 1935. 2s. R.

KAVANAGH (C. J.)
*Steel in building. (British Steelwork Association.)
pam. $8\frac{1}{2}''$. Lond. 1935. R (2).

Sanitary Science and Equipment

HOPE (E. W.)
Health at the gateway. Problems . . . of a seaport city.
$8\frac{1}{2}''$. xiv+213 pp.+pls., some folded. Camb.: U.P. 1931. (3s. 6d.) P.

INSTITUTE OF PLUMBERS
Minimum Specification (No. III) for drainage work in connection with buildings. pam. $8\frac{1}{2}''$. Lond. 1935. 2s. R.(2).

BRITISH STANDARDS INSTITUTION
B.S.S. (No. 416) for cast iron spigot and socket soil, waste, ventilating, and heavy rainwater pipes. (Superseding Nos. 58, 59.)
Revised ed. 1935. 2s. R.

STUDHOLME (R. H.)
Electricity law and practice.
$9\frac{3}{4}''$. xxx+472+[30] pp. Lond.: Pitman. 1935. £1 10s. R.

BRITISH STANDARDS INSTITUTION
B.S.S. (No. 555) for tungsten filament electric lamps. (Other than general service lamps.) (Formerly part of No. 161.)
Revised ed. 1935. 2s. R.

Societies

BRITISH STANDARDS INSTITUTION
[Revision slips received for:—]
No. 77. Voltages for new systems and installations.
,, 88 Electric cut-outs.
,, 233. Glossary of terms used in illumination, *etc.*
,, 495. Fittings for double-capped tubular lamps.
,, 546. Two-pole and earthing-pin plugs and socket-outlets.

GUILD OF BUILDING
The G— of B— Review. No. 6 (July–Dec.). 1934. 1s.
(*Including:* Taylor (R. F.). Glass.
Findlay (W. P. K.). Dry rot in buildings.
Pilkington (F. S.). Welding as applied to structural and maintenance work.
Geary (W.). Paints, their properties and uses.
Joseph (E. L.). Ventilation and air purification.
Rowley (E. H.). The preservative treatment of timber.)

NATIONAL FEDERATION OF BUILDING TRADES OPERATIVES
Presidential address to the 18th annual conference, . . . 1935. 1935.

Periodicals

SANDS, CLAYS AND MINERALS
—. Vol. ii, No. 3 (June). 1935.
(*Including:* Threlfall (C. R. F.). Manufacture of firebrick.
Bidnikoff (P.). Quartz sand in silica brick manufacture.
Rigby (C. L.). Magnesite and magnesite bricks.)

TOPOGRAPHY

PAKINGTON (HUMPHREY)
English villages and hamlets.
$8\frac{1}{2}''$. viii + 120 pp. + pls. Lond.: Batsford. 1934. 7s. 6d. R.

JENKINS (J. GILBERT)
A History of the parish of Penn in the County of Buckingham. Illus. by E. T. Jenkins.
$9\frac{3}{4}''$. (xii)+213 pp. Lond.: S. Catherine Press. 1935. 7s. 6d. P.

TOWN AND COUNTRY PLANNING

LLOYD (T. ALWYN)
*Planning in town and country. (The New World series.)
$7\frac{1}{4}''$. viii+208 pp.+13 pls. Lond.: Routledge. 1935. 5s. R. & P.

TOWN PLANNING INSTITUTE
Schedule of professional charges. 1934. [With sticker amendment.]
leaflet. $11\frac{1}{4}'' \times 8\frac{1}{2}''$. Lond. 1934. R.

CORNISH (VAUGHAN)
The Scenic amenity of Great Britain. (*From* Geography, Sept.)
pam. 10″. Manchester: Geographical Assocn. 1934. 3d. R.

Societies

COUNCIL FOR THE PRESERVATION OF RURAL WALES
Annual report: 7th, [on] 1934. [1935.]

SOCIETIES (GENERAL)

MAGYAR MÉRNÖK-ÉS ÉPITÉSZ-EGYLET (Hungarian Society of Engineers and Architects)
Évkönyve [annual]: xv, 1934. 1934. R.
[*Including:* History of society, statutes, prize problems and winners, and register of members.]

Review of Periodicals

Attempt is made in this review to refer to the more important articles in all the journals received by the Library. None of the journals mentioned are in the Loan Library, but the Librarian will be pleased to give information about prices and where each journal can be obtained. Members can have photostat copies of particular articles made at their own cost on application to the Librarian.

SCHOOLS

ARCHITECT AND BUILDING NEWS. *Vol. CXLII. No. 3471. 28 June.*

Talbot Heath School, Bournemouth (J. Hubert Worthington [*F.*]). New buildings for the Bournemouth High School for girls, catering for 500 day pupils and boarders. Full description and plans, etc.

EXHIBITIONS

ARCHITECTURAL REVIEW. *Vol. LXXVIII. July. P. 1.*

Brussels Exhibition. A vigorous and well illustrated critical appreciation of the Exhibition by John Gloag.

ARCHITETTURA ITALIANA. *Vol. XXX. No. 5. May.*

The Fashions Exhibition, Turin, 1935. Well and simply staged.

MUSEUMS AND LIBRARIES

AMERICAN ARCHITECT. *Vol. CXLVI. No. 2634. June. P. 11.*

Indiana State Library and Historical Buildings, Indianapolis (Pierre and Wright).

ARCHITETTURA ITALIANA. *Vol. XXX. No. 6. June.*

School Study for a National Library at Rome.

BOUWKUNDIG WEEKBLAD ARCHITECTURA. *1935. No. 27. 6 July. P. 269.*

The new Boymans Museum, Rotterdam, a large gallery for sculpture, paintings, etc.: includes exhibition and storage galleries, lecture theatre and offices, etc.; an important building.

MONATSHEFTE F. BAUKUNST U. STADTEBAU. *Vol. XIX. No. 7. July. P. 257.*

The New Museum at the Hague by Berlage. His last work, fully described and illustrated.

CIVIC BUILDINGS

BUILDER. *Vol. CXLVIII. No. 4822. 5 July.*

ARCHITECT AND BUILDING NEWS. *Vol. CXLIII. No. 3472. 5 July.*

Bishopsgate Police Station and Hospital Competition premiated designs.

ARCHITECT AND BUILDING NEWS. *Vol. CXLII. No. 3471. 28 June.*

Accrington, New Courts, Police Station and Fire Station (Percy Thomas [*F.*]).

BUILDER. *Vol. CXLVIII. No. 4822. 5 July.*

ARCHITECTS' JOURNAL. *Vol. LXXXII. No. 2111. 4 July.*

Kingston Guildhall (Maurice Webb [*F.*]).

SPORTS BUILDINGS

MONATSHEFTE F. BAUKUNST U. STADTEBAU. *Vol. XIX. No. 7. July. P. 262.*

Covered-in Tennis Courts, Amsterdam (Boeken and Zweedijk). Five courts and club rooms, etc.

ARQUITECTURA (MADRID). *Vol. XVII. No. 4. June. P. 125.*

Competition designs for racecourse stands, Madrid.

ARCHITECTURE ILLUSTRATED. *June 1935. P. 187.*

Wimbledon Park Golf Course (F. P. M. Woodhouse [*A.*]).

MARKETS

ARQUITECTURA (MADRID). *Vol. XVII. No. 4. June. P. 115.*

New Markets in Madrid. Descriptions of several interesting covered markets, all in a modern style and construction.

TRANSPORT BUILDINGS

ARQUITECTURA (MADRID). *Vol. XVII. No. 4. June. P. 143.*

A large petrol station and garage. Analytical article and many illustrations.

HOSPITALS

CONSTRUCTION MODERNE *Vol. L. No. 39. 30 June. P. 838.*

Sanatorium Geoffroy de Martin Janville, Passy, Haute Savoie, by Pol Abraham and le Même, whose previous sanatoria in the Savoy are well known; they are all built under one philanthropic foundation. The building is excellently illustrated and described. A useful reference.

BAUMEISTER. *Vol. XXXIII. No. 7. July. P. 221.*

Hospitals. A number of valuable articles describing and analysing several recent buildings in Germany and elsewhere. An article on hospital plumbing and on the hospital in relation to regional and town plans.

JOURNAL OF ROYAL SANITARY INSTITUTE. *Vol. LVI. No. 1. July. P. 18.*

Some features of a Modern General Hospital. Article by Dr. D. G. Morgan, with notes on site, construction and equipment. Notes on Tuberculosis Hospital Planning by Dr. W. Davies. Both useful references.

BUILDER. *Vol. CXLVIII. No. 4821. 28 June. P. 1192.*

Middlesex Hospital. Illustrations of new buildings (Alner W. Hall [*F.*]). Also Hendon Cottage Hospital (W. Marchment [*F.*]).

ARCHITECT AND BUILDING NEWS. *Vol. CXLIII. No. 3472. 5 July.*

Sussex Eye Hospital (Denman and Son [*F.*]).

ARCHITETTURA ITALIANA. *Vol. XXX. No. 5. May.*

Sun Therapy Institute at Turin. Drawings and photographs of the completed buildings by L. Ferroglio, F. Grassi and M. Passanti.

THEATRES AND CINEMAS

CASA BELLA (MILAN). *Vol. XIII. No. 90. June. P. 36.*
The Theatro Sociale at Busto-Arsizio. A simple modern theatre.

ARCHITECTURAL REVIEW. *Vol. LXXVIII. July. P. 19.*
Astoria Cinema, Folkestone, by E. A. Stone, in association with Ewen Barr. Cinema at Weston-super-Mare, by T. C. Howitt [*F.*]).

RESTAURANTS

MODERNE BAUFORMEN. *Vol. XXXIV. No 7. July. P. 373.*
"Grill am Ring," a large restaurant at Cologne (A. Sander).

RECREATION BUILDINGS

ARCHITECT AND BUILDING NEWS. *Vol. CXLII. No. 3471 28 June.*
The Architecture of Pleasure. Illustrations of J. Emberton's Blackpool Pleasure beach buildings.

ARKITEKTEN MAANEDSHAEFTE (COPENHAGEN). *Vol. XXXVII. No. 4.*
Children's playgrounds in towns. A useful reference on provision of amenities and planning.

CHURCH ORGANS

BAUGILDE. *Vol. XVII. No. 13. P. 447.*
Organs. Article by Walter Supper, "architect and organist," on organs in architecture, with several good illustrations of new and old examples in Germany.

DOMESTIC

ARCHITECT AND BUILDING NEWS. *Vol. CXLII. No. 3469. 14 June. P. 307.*
Old People's Home, Heerlen, Holland (Peutz and Kloos), a home for old women, with Principal's house, cloister for sisters, and gardener's lodging, and chapel.

BUILDING. *Vol. X. No. 6. June. P. 220.*

ARCHITECT AND BUILDING NEWS. *Vol. CXLII. No. 3469. 14 June. P. 304.*
Flats in Lowndes Street, London (Burnet, Tait and Lorne [*FF.*])

ARCHITECTURE ILLUSTRATED. *June 1935. P. 178.*
Various London Flats, by Welch, Cachemaille-Day and Lander; Wimperis, Simpson and Guthrie and Messrs. Joseph.

MONATSHEFTE F. BAUKUNST U. STADTEBAU. *Vol. XIX. No. 6. P. 217.*
Farm buildings, house and barns combined near Berlin. A traditional solution of the farm plan (C. H. Lörcher).

ARCHITECT AND BUILDING NEWS. *Vol. CXLII. No. 3469. 14 June. P. 315.*
One-storey house at Churt for Mr. Lloyd George (Chitty and Tecton [*AA.*]).

DESIGN AND CONSTRUCTION. *Vol. V. No. 8. June. P. 266.*
Flats. Second series of special articles. Construction by W. Sadler [*A.*]; Finishes, L. S. Slaughter [*A.*]; Engineering Equipment, M. L. Winslade [*A.*]; Soundproofing internal noises, C. C. Handisyde [*A.*].

FURNITURE

ARCHITECTURAL RECORD. *Vol LXXVII. No. 5. May. P. 304.*
Furniture and domestic equipment. Illustrations of a number of good modern pieces, including chairs designed by Marcel Breuer, which won prize as best aluminium chairs in the world.

MONATSHEFTE F. BAUKUNST U. STADTEBAU. *Vol. XIX. No. 6.*
Supplement on children's furniture. A useful reference.

BUILDING SCIENCE AND CONSTRUCTION

LA CONSTRUCTION MODERNE. *Vol. L. No. 36. 9 June. P. 788.*
Archæology and the resistance of materials. An interesting study of the mechanics of ancient structures.

AMERICAN ARCHITECT. *Vol. CXLVI. No. 2633. May. P. 69.*
Prefabrication of houses with concrete.

HEATING, LIGHTING AND VENTILATION

ARCHITECTURE D'AUJOURD'HUI. *Vol. 6. No. 5. May.*
Special Heating and Ventilating Number, with articles on the production and distribution of heat by various methods—gas, oil fuel, electricity, etc.; mass produced heating for towns, and heating systems for particular buildings—cinemas, hotels, flats, private houses, etc. Illustrated supplement of technical data of modern plant.

HEATING AND VENTILATING ENGINEER. *Vol. VIII. No. 96. June. P. 474.*
Air conditioning of the New Library quadrants at the British Museum. A useful reference on the important subject of library ventilation.

HEATING AND VENTILATING ENGINEER. *Vol. VIII. No. 96. June. P. 474.*
Air conditioning design for office buildings.

ILLUMINATING ENGINEER. *Vol. XXVIII. June. P. 194.*
Articles on Jubilee Floodlighting.

TOWN PLANNING

AMERICAN ARCHITECT. *Vol. CXLVI. No. 2633. May. P. 55.*
Broadacre City. Frank Lloyd Wright's model of an ideal community group. The plan for a tract of 4 square miles provides facilities for 1,400 families averaging over five persons per family. It is notable that he has designed for houses and not skyscraper tenements.

ARCHITETTURA (MILAN). *Vol. XIV. May. P. 311.*
Gydnia. The new seaport of Poland.

BUILDING LAW

ARCHITECT AND BUILDING NEWS. *Vol. CXLII. No. 3466. 24 May. P. 222.*
London Building Act. Review of the Report of the L.C.C. Advisory Committee.

QUARTERLY ILLUSTRATED. *No. 49. P. 21.*
Building Bye-Laws in Scotland. Article by John Wilson [*F.*].

SCULPTURE

MODERNE BAUFORMEN. *Vol. XXXIV. No. 6. June.*
Recent architectural sculpture.—Reliefs in a salt mine near Heilbronn, Württemburg; in a grave chapel, Milan; the "Ocean Flights" room at the Milan Aero Exhibition; a memorial stone and post for a pump in Munich aerodrome.

HISTORICAL

ARQUITECTURA (MADRID). *Vol. XVII. No. 3. May. P. 75.*
The work of Don Ventura Rodriguez (died 1785), architect of many of the finest late Spanish Renaissance buildings. This Journal of the Colegio Official de Arquitectos de Madrid is now received regularly by the Library.

Correspondence

THE GLASGOW CONFERENCE AND MODERN ARCHITECTURE

38 Conduit Street,
London, W.1.
9 July 1935.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—The report, in the last issue of your JOURNAL, of the proceedings of the June Conference at Glasgow makes melancholy, almost mediæval, reading.

"Three of us quite independently have thought this modern movement is nothing more or less than a disease," said Professor T. Harold Hughes, buckling on his bright sword. And riding forth he struck some mighty blows at the suspicious thickets, in which the dying squeals of many a pseudo-modernist could be distinctly heard. As he went he raised his shrill war-cry:

"Can we evolve a new style in one generation? History and common sense both say emphatically, NO!"

"Photography replaces serious study and gives us the opportunity to copy the latest tricks!"

"In ignoring the past the would-be modernist is most scathing of the work of the Renaissance!"

"It is no sign of ability to slight, or to underrate, the work of our forefathers."

It was a magnificent combat and at last, worn out with sword-play, the professor sank down to rest in the shadow and beauty of the Parthenon, Sancta Sophia and Amiens. And while he was resting there the voice of the impertinent student was heard in the land: "A little more thought should be given to modernism in schools. The *good* in modern architecture should be pointed out, and pointed out very forcibly."

So much for Glasgow. A breathless telegram arrived as the discussions were ending. "Congratulations on your progress." Progress! Was there ever an age and an art in which the real progress was so obscured by petty issues? We do not yet seem to realise what the twentieth century means, or could mean. We wrangle about design. We argue about ornament. We lament tradition, yet it is the social aspect of architecture which matters. England disintegrates while we pursue our politics on the very threshold of a new world. What do we really need? Organisation, co-operation, planning; these living forces which can produce order, order which is the chief meaning of the new architecture.

A little book called *The New Architecture and the Bauhaus*, by Walter Gropius, has just been published in England. It is a modest account of liberation, ending significantly with these words:

"The ethical necessity of the New Architecture can no longer be called in doubt. And the proof of this—if proof were still needed—is that in all countries youth has been fired with its inspiration." RAYMOND MCGRATH [*A.*]

ST. ANDREW'S, WELLS STREET

1, Park Crescent, W.1.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—In the JOURNAL of 13 October 1934 (pp. 1051ff.) there appeared an account of the removal of the Church of St. Andrew from Wells Street, Marylebone, to Kingsbury. That account, with the beautiful pictures which accompanied it, has proved of the greatest interest to former worshippers at the church in Wells Street.

It has been pointed out, however, by one of them that no mention was made of the sculptor who carved the wonderful reredos. It is described as having been "the work of G. E. Street," and the conception of the general design was certainly his. But the actual carving was done by a young sculptor of genius—James Redfern. Of humble origin and illiterate, he was discovered as a lad in the moorlands of South Staffordshire by the insight of Mr. Webb, afterwards the well-known Vicar of St. Andrew's, and through him brought to the notice of Mr. Beresford Hope. By Mr. Hope's liberality he was first educated and then placed in the offices of Messrs. Clayton and Bell for professional training. A career of distinction followed, in the course of which Redfern executed, besides the reredos of St. Andrew's, the reredos in Gloucester Cathedral, the statues in the Chapter House at Westminster, and other important works. But his life was cut short at the early age of 38.

It is fitting, therefore, that the memory of one whose genius helped to adorn St. Andrew's should be kept alive for those who admire this work of his, and who love the church in which it is set.—I am, dear Sir, faithfully yours,

E. H. HOLTHOUSE
(*Late People's Warden, St. Andrew's, Wells Street*).

P.S.—This brief note is drawn from the descriptive account of St. Andrew's, Wells Street, written by the late Miss Mary Webb and privately printed. The book is now hardly procurable.

PAYMENT FOR ADDITIONAL USE OF PARTY WALL UNDER LONDON BUILDING ACT

6 Gray's Inn Place, W.C.1.
June 1935.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—In furtherance to the opinion of the Institute solicitor upon the above, members may find interest in a report of a case given in the JOURNAL, 18 December 1926. The facts were as follows:—

Plaintiff built his house in 1909, including a party wall with flues and breasts on its outer side. In 1926 defendant built another house, making use of the party wall. The question before the County Court Judge (Lindley) was as to the value to be paid for a share of the wall. Plaintiff claimed half the present-day value (1926), whereas defendant contended he should only be required to pay half the original cost of construction.

In evidence it was shown that both parties were master builders and His Honour held that the increased cost of building had not put the plaintiff to any additional expense, and therefore defendant should pay half the cost of the actual erection and no more.

It appeared, further, that plaintiff's figures were based upon ordinary contract prices, plus profit, and the learned Judge held that as the builder was also the owner he was only entitled to be recouped for his actual disbursement.—I am, dear Sir, faithfully yours, W. E. WATSON [*F.*]

A CRUISE TO BRUSSELS EXHIBITION AND YPRES

The South-Eastern Society of Architects,
Headquarters—St. Moritz, The Upper Avenue, Easthourne.
8 July 1935.

To the Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—A party of over a hundred architects and their ladies were greatly impressed with a recent visit to Holland arranged by the

Norfolk and Norwich Association. Our experiences were so gratifying from an informative and social aspect and so economical in point of time and money that I have been asked to organise another such cruise to Belgium on Friday, 23 August. We have obtained an option of 100 reservations from the L.N.E.R. Company at a reduced rate of £3 8s. 6d.

Our Belgian colleagues are arranging for motor-coach visits to Antwerp, Brussels and Ypres to inspect recent modern buildings, in addition to the historical buildings and the Brussels Exhibition.

I would be very much obliged if you would be good enough to draw attention in the R.I.B.A. JOURNAL to this very advantageous week-end cruise. A folder with further particulars can be obtained from the General Secretary, South-Eastern Society of Architects, St. Moritz, Eastbourne.—Yours sincerely,

R. GOULBURN LOVELL.

Obituary

FRANK RICHARD FREEMAN [*F.*]

Mr. F. R. Freeman was born in 1870 and died in June 1934. He was educated at Rossall College and Manchester University, afterwards working in the office of his father, the late R. Knill Freeman [*F.*], and for a short period with Sir Thomas Drew, in Dublin. Until the death of his father in 1904 he practised with him as R. Knill Freeman and Son, afterwards practising independently under his own name.

Mr. F. R. Freeman was a specialist in ecclesiastic architecture. The churches and schools designed and altered by him are too numerous to mention here, but from his start in practice till his death, over 60 churches had been built or restored by him, and 11 vicarages and 18 schools had been built. In addition he carried out a great deal of work restoring and adding to large private houses and offices, and was responsible for cotton mill extensions in Bolton, Paisley and Belfast. He was the architect of the Bolton Infirmary, Chadwick's Museum, Bolton, the Free Library and Museum, Derby, and many hotels, piers, shops, etc., in Bolton, Blackpool and Southport. His most recent work was the new Church of St. Bede, Morris Green, Bolton.

Mr. Freeman was elected a Fellow of the Institute in 1933. He was a Fellow of the Manchester Society of Architects and a member of the Manchester Diocesan Church Building Society.

His practice is being carried on by Mr. Herbert Walker Higson [*L.*], an Associate of the Manchester Society of Architects, for 17 years his chief assistant.

LOUIS HARRISON [*F.*]

Mr. Louis Harrison, the architect of the War Memorial at Albury, New South Wales, was born in 1867 and died on 31 October 1934. He received his training in the office of his father, Mr. Frederick Harrison, whose practice in Deniliquin he later took over and carried on. Since 1914 he practised at Albury. He was responsible for the Hospital and School of Arts, Deniliquin, and many of Albury's public buildings, including Hoyt's Theatre, the Commercial Club, the Christian Brothers' College and Monastery, St. Patrick's Hall, the ambulance station, many local hotels and offices and the War Memorial. He held the post of Hon. Architect to Albury Hospital, and was also District Architect for War Service Homes Department. He was elected a Fellow of the Institute in 1932, and was also a Fellow of the R.V.I.A.

JAMES ANDERSON WILLIAMSON [*A.*]

Mr. James Anderson Williamson [*A.*], City Architect of Edinburgh from 1908 till 1925, died on 21 March.

Born in 1860 at Dalbeattie in Kirkcudbright, Mr. Williamson was educated at the Wallacehall Academy, Thornhill, Dumfriesshire. After serving his articles of pupilage in England he went as an assistant to Messrs. Peddie and Kinnear, architects, Edinburgh, and next year entered the Public Works Department of the City, his chief being then Mr. Robert Morham. In 1884 he passed his examination as Associate of the Institute. Along with Mr. A. R. Scott he won an open competition for the development of the North Bridge, but this was not carried out. In 1898 he was appointed Deputy City Architect, and succeeded Mr. Morham on his retirement in 1908.

During the 27 years from his appointment as Deputy he was responsible for many important works, including the Central Fire Station, Sea Water Public Baths at Portobello, Portobello Town Hall, Morningside Public Library, various Public Washhouses, the complete new Cattle Markets and Slaughterhouses at Gorgie, Police Stations McLeod Street and Saunders Street, the first Post-War Housing Scheme at Gorgie, the first portion of the Electric Power Station at Portobello, restoration of Milne's Court, etc. All these buildings were planned with thoroughness and care, and are still usefully fulfilling their functions. The Markets and Abattoir, the result of a study of Continental Schemes, though carried out a quarter of a century ago, are still very frequently visited by deputations from other cities.

During Mr. Williamson's years of service of the City, he had to do with a remarkable period of advancement during which provision was made for the essential civic services, none of which had existed 45 years before except in a very crude form.

Mr. Williamson was quiet and retiring, with an essential kindliness and thoughtfulness of disposition, and always held the warm affection of his staff.

HENRY EDWARD LAVENDER [*L.*]

Mr. H. E. Lavender, who died on 17 February 1935, in his 80th year, was born in 1855 and educated in the office of the late Mr. Chamberlin in Walsall. In 1876 he started in personal practice in Walsall, practising also in Wolverhampton under the title J. and H. E. Lavender. His Walsall practice was later carried on under the title of H. E. Lavender and Son.

Amongst his architectural works are Walsall Workhouse, N. Walsall Schools, Park Pavilion, Walsall, W. H. Smith and Son's new buildings, Walsall, public buildings, ecclesiastical works, and many factories and schools. Mr. Freeman also always did his own Quantities and Valuations.

His practice will be carried on by Mr. E. P. Lavender [*F.*], of Walsall and Hayes, in partnership with Mr. H. F. Bury Close, A.I.A.A., at 65 Upper Bridge Street, Walsall, under the title H. E. Lavender, Son and Close.

DEREK NEWLANDS ABBOTT [*A.*]

Mr. Derek Newlands Abbott died on 7 January at the age of 27. He received his architectural training at the A.A. School of Architecture, and in 1931 joined Mr. W. Byrne in practice in Dublin for six months. He was forced to retire owing to ill-health and for three years travelled and studied extensively. In February 1934 he went to Harvard University, where he studied economics, history and international relations, completing his courses with distinction. After a three months' illness he died in January 1935, leaving a widow and baby daughter.

Notes

ORDNANCE SURVEY MAPS

The Science Standing Committee has been informed by the Secretary of the Ordnance Survey Committee that the Minister of Agriculture and Fisheries has appointed the Committee, with the following terms of reference:

(*a*) To consider what measures are necessary to accelerate the revision of the Ordnance Survey maps in order to bring them up-to-date and thereafter maintain them at a high level of accuracy, while providing for such other public services as are undertaken by the Ordnance Survey Department;

(*b*) To consider what immediate steps are possible in the meantime to revise Ordnance Survey maps to the extent necessary for the purpose of town and country planning schemes;

(*c*) To review the scales and styles of Ordnance Survey maps placed on sale to the public and to recommend whether any changes are desirable; and

(*d*) To review the conditions upon which the reproduction of Ordnance Survey maps is permitted.

It is proposed in the first place to consider paragraphs (*b*) and (*d*) of the terms of reference, and to prepare an interim report on these questions at an early date.

The Royal Institute has been invited by the Ordnance Survey Committee to assist with evidence on the questions referred to it; separate memoranda on paragraphs (*b*) and (*d*) are asked for in the first instance.

The Science Standing Committee has accordingly set up a small sub-committee in order to prepare memoranda, and would be very glad to receive from members generally their experience and suggestions relative to the above terms of reference.

Members are requested to write as early as possible to the Hon. Secretary of the Science Standing Committee, 66 Portland Place, London, W.1.

COURSE FOR TEACHERS OF BUILDING

The Board of Education has arranged a short course for teachers of building subjects on the science of building materials (with special reference to non-metallic materials). The course, which is under the direction of Mr. Martin S. Briggs [*F.*], H.M.I., will consist of a series of lectures at the Westminster Technical Institute, Vincent Square, between Monday, 22 July, and Thursday, 1 August. There will also be visits during the course to brickworks, various buildings and to the Building Research Station. The tutors for the course will be Mr. J. L. Manson, H.M.I., Staff Inspector of Buildings, and Dr. H. H. Burgess, H.M.I. The lecturers will include Dr. Stradling and specialists in various branches of building science.

LECTURE AND EXHIBITION AT THE R.I.B.A.

On 29 July at 3.30 p.m. there will be a Lecture at the R.I.B.A. by M. Georges Loukomski, on the Palazzo Farnese Caprarola, illustrated by an exhibition of M. Loukomski's drawings of the sculptures and gardens of the Palace. His Excellency the Italian Ambassador, Signor Grandi, will be present. All members of the R.I.B.A. are invited.

OPEN ENTRANCE SCHOLARSHIPS IN ARCHITECTURE

Two Open Entrance Scholarships in architecture for 1935 (each value 72 guineas per annum), tenable at the Architectural Association School of Architecture, have been awarded to Mr. R. S. W. Smith (Felsted School) and Mr. P. I. D. Tetley (Charterhouse School).

Mr. P. H. Braddock (King's College, Wimbledon), Mr. J. L. C. Bailey (Rugby School), and Mr. R. B. Holland (Harrow School) gained Honourable Mentions.

FRANCO-BRITISH UNION OF ARCHITECTS

After the June meeting of the Franco-British Union of Architects at St. Malo, Monsieur Maurice Gras, the President, wrote to Mr. Henry M. Fletcher, the retiring President, as follows:—

Mon cher Président,—

Je serai heureux de transmettre à nos confrères les lignes très amicales que vous venez de m'adresser, et je puis vous assurer en leur nom que nous remportons tous de ces quelques jours passés ensemble, un inoubliable souvenir.

Veuillez être notre interprète anglais auprès de nos amis britanniques pour leur dire combien leur aimable camaraderie, leur bonne humeur ont contribué, avec le charme de ces dames (qui ont si vaillamment supporté la mauvaise traversée) à faire de cette excursion une partie de plaisir dont nous les remercions vivement.

MAURICE GRAS.

R.I.B.A. DRAMATIC SOCIETY

The R.I.B.A. Dramatic Society are considering the production of an original play, and would welcome any manuscript plays by members of the Institute with a view to future production. No promise of production can be made, but all plays will be carefully read.

The plays should be sent to Miss Caldicott at the Architectural Association.

R.I.B.A. DANCE CLUB

A meeting of subscribers to the Dance Club will be held at the R.I.B.A. on Thursday, 18 July, at 4.30 p.m., for the purpose of electing the Committee of the Club for the session 1935–36, and for other business connected with the Club. All members who have subscribed to the R.I.B.A. Dances are invited to attend.

THE ANGLO-SWEDISH SOCIETY

HOLIDAY COURSES IN SWEDEN—SUMMER, 1935

The success of the holiday tour, organised for Sweden in the summer of 1934, was such that the Society has decided to make a repetition of this venture. The tour will be organised principally for those who are interested in the art and architecture of Sweden, and also its achievements as to engineering. It will cover places of artistic and scientific interest and include a visit of 12 days in Stockholm.

Though the tour is organised for these two groups, the study will not be so specialised as to preclude the inclusion of those whose interests are more general, and the route is being purposely planned to include some of the most beautiful scenery in Sweden, and an attractive programme for the stay in Stockholm is in preparation.

Group 1.—Swedish Architecture and Allied Arts. This course

will consist of lectures by eminent architects and professors, and arrangements have been made for the following lectures: The Training of the Swedish Architect, the Restoration of Old Buildings in Sweden, Planning of the Modern Hospital, the Modern School Buildings, Latest Designs in Arts and Crafts, a Survey of Swedish Art in Industry, Swedish Paintings (a conducted tour at National Museum). Visits will also be made to various buildings of interest.

Group 2.—Engineering. This course will consist of lectures on the development in Sweden of engineering; demonstrations and visits to a number of important places, such as: The Bridges and Stockholm Power Station, Gas-Accumulator (Aga), Ericssons Telephones, The Electrolux Works, Atlas Diesel, A.S.E.A. (The Swedish General Electric Co.), S.K.F. (The Swedish Ball Bearing Co.).

Members participating in the tour will leave London on Saturday, 17 August, arriving back on Monday morning, 2 September.

The price of the tour is £16 16s., 1st class steamer, 3rd class rail travel, excellent accommodation in Stockholm, with bed and breakfast, gratuities (except those on the steamer). Full board in Stockholm can be obtained by an additional payment of £1 10s.

Sight-seeing tours in Stockholm and neighbourhood will be arranged free of charge, but at a very low cost members can partake in excursions farther afield. For those who wish to make a longer stay in Sweden, an extension can be granted for another fortnight.

Applications should be made at an early date to the Secretary, Anglo-Swedish Society, 10, Staple Inn, High Holborn, W.C.1, who will be pleased to send further information and details to those who wish to avail themselves of this opportunity.

STUDENTS' EVENING AT THE R.I.B.A EXHIBITION OF ARCHITECTS' WORKING DRAWINGS

On Thursday, 27 June, a Students' Evening was held in connection with the R.I.B.A. Exhibition of Architects' Working Drawings.

There was an excellent attendance of students, and they spent a considerable time inspecting the exhibition, which included drawings kindly lent by:—

Mr. John L. Denman, F.R.I.B.A. (Rickmansworth Girls' School).

Messrs. Harry S. Fairhurst and Son, F/A.R.I.B.A. (Manchester Building for Messrs. Rylands and Sons).

Professor W. G. Newton, F.R.I.B.A. (Merchants Taylors' School).

Mr. R. H. Uren, A.R.I.B.A. (Hornsey Town Hall).

Mr. Wells Coates, Ph.D. (Lawn Road Flats, Hampstead).

Mr. John L. Denman, Mr. P. G. Fairhurst, Professor W. G. Newton and Mr. R. H. Uren kindly attended and explained to the students the special points of interest in their respective drawings.

CONFERENCE PHOTOGRAPHS

Copies of snapshots taken on Tour No. 2 of the Glasgow Conference can be obtained from Mr. A. T. Caldwell [*L.*], 5 Ronald Place, Stirling. The snapshots include groups outside Dunblane Cathedral, Gleneagles Hotel, the Golden Lion Hotel, Stirling, and the Bailie Nicol Jarvie Hotel, Aberfoyle. An enlargement is being made of the photograph of the whole party taken on the steps of the Gleneagles Hotel.

Allied Societies

NORFOLK AND NORWICH ASSOCIATION OF ARCHITECTS

Cruise to Holland

The Norfolk and Norwich Association of Architects recently held what must be one of the most ambitious and successful ventures ever organised by an Allied Society in making a concerted visit to Holland during the week-end 28 June to 1 July last. Forty-five members left Norwich by the 6.45 p.m. train on Friday evening *en route* for Parkeston Quay and boarded S.S. Vienna, there being joined by members and friends from other Allied Societies from Manchester, York, Birmingham, Portsmouth, etc., the whole party numbering 109.

The S.S. Vienna sailed at 11 p.m. under a cloudless sky and early the next morning was off the coast of Holland, arriving at the entrance to the North Sea Channel about 8 a.m. After passing through the lock, one of the largest in the world, the boat sailed up the canal, passing through country very reminiscent of parts of Norfolk, and reached Amsterdam about 12 noon.

In the afternoon a large party made a charabanc tour of the city to see the modern work under the personal guidance of De Heer De Bie Lueveling Tjeenk, the President of the Dutch Architectural Association, and members of the Amsterdam Architectural Association, all of whom spoke excellent English.

A halt was made to inspect large blocks of buildings, including the skyscraper, and then driving through the housing estates until the gymnasium was reached. Here the party were conducted through the building, which is an excellent equipped school for higher education, many internal features being particularly noticed.

On through picturesque ways to the Tennishal, set by the side of a broad canal, where the party partook of hospitality provided by the Amsterdam Architectural Association.

After tea, Mr. E. W. B. Scott, President, Norfolk and Norwich Association of Architects, proposed a vote of thanks to our Dutch guests, and Mr. S. J. Wearing seconded. Then the party visited an open-air school by Duiker, and by a devious route, including one of the best residential areas in the city and the main streets, eventually reached the quay and boarded S.S. Vienna.

After dinner, small parties visited parts of the city privately.

An impromptu trip was organised by charabanc to Hilversum and about thirty-five members took advantage of this to see some of Dudok's works.

Early Sunday morning the "Vienna" left her berth and proceeded down the canal, and thence under ideal conditions cruised to the Hook of Holland. In the afternoon all the passengers were conveyed by special electric train to The Hague. Here some joined a rambling party, others going to Scheveningen, the seaside resort of The Hague and district, and then returned by special train to the boat.

A small party went on to Rotterdam and did not come aboard until shortly before the boat sailed.

Deck games during the morning and dancing in the evening made the time pass pleasantly whilst afloat.

At about 11 p.m., the S.S. Vienna put to sea again, homeward bound for Parkeston, which was reached about 5.30 a.m.

Here the party broke up, some back to London by the 7.0 a.m., and others by the 7.25 for Norwich and the Midlands, and the arrangements were admirably carried out by Mr. Eric H. Skipper, Hon. Secretary of Norfolk and Norwich Association of Architects.

Everyone agreed it was a most interesting and enjoyable trip, and the suggestion was made that at some future date the R.I.B.A. Conference should be held afloat.

WEST YORKSHIRE SOCIETY OF ARCHITECTS

Travelling Scholarships

Once again through the generosity of Sir William Nicholson, of Hellifield, the society announce travelling scholarships to the value of £200, divided into two of £25, two of £50 and one of £50. Successful candidates must submit an itinerary of the proposed tours to the Hon. Secretary, it being understood that the scholarships are intended for study at approved centres, rather than for extensive

travel. The society retain the prior rights of publication of all drawings, photographs or sketches made during the tenure of the scholarships.

One Bedford Scholarship to the value of £60 is also open for competition, with no age limit, the successful candidate to undertake six weeks' travel and research on the Continent for specialised study approved by the council.

Halifax Branch

The inaugural meeting of the Halifax branch was held on 8 April at the Old Cock Hotel, Halifax, when about sixteen members were present. The following were elected officers :—Chairman, Mr. C. E. Fox; Vice-chairman, Mr. G. Maddock; Hon. Secretary, Mr. C. Sunderland. Committee: Messrs. Wm. Hall, C. E. Horsfall, A. Ingham and G. R. Oddy.

Mr. Fox, speaking from the chair, in acknowledging the honour of his election, said it was no doubt due to the efforts he had made in getting the branch established, although he hoped soon to see a younger member occupying the chair. It had long been his ambition that something more stable should succeed the old Halifax Architectural Society which had had a somewhat chequered career. The branch had a membership which only needed a properly organised plan of activities well supported by the members to warrant its formation. Mr. Victor Bain, president of the West Yorkshire Society, supported by Mr. B. R. Gribbon and Mr. R. Norval Paxton, also spoke and tendered their best wishes for the success of the branch.

Secondary School Lectures

Lectures have been given on "A Sketch of Historical Architecture," at Bingley Grammar School, by Mr. E. O. Richardson; on "Architecture Old and New," at Sowerby Secondary School, by Mr. C. Sunderland; and on "Architecture To-day," at Settle Girls' High School; "Architectural Development," at Ilkley Grammar School and at Rothwell Grammar School, by Mr. J. S. Allan, who also gave the same lecture at the Skipton Girls' High School. The lectures attracted large attendances of scholars and staffs, in one case amounting to about 150, and justified the policy which the West Yorkshire Society is pursuing.

Membership Lists

ELECTION OF STUDENTS R.I.B.A.

The following were elected as Students R.I.B.A. at the meeting of the Council held on 8 July 1935.

Alexander: Philip Moore, Sandon, Wellington Road, Timperley, Cheshire.

Atkinson: Charles Henry, 89 Walker Avenue, Great Lever, Bolton, Lancs.

Baldwin: Edward Thomas, 47 Guphill Avenue, Whoberley, Coventry.

Beaumont: Eric Waite, 2B Wingate-Saul Road, Lancaster.

Bellinger: Clifford, Brize Norton, Oxford.

Billing: Stuart Bertram, 70 Ommaney Road, New Cross Gate, London, S.E.14.

Binks: Cyril, Scotchman Lane, Morley, Near Leeds.

Blackburn: Jack, 15 Norwood Avenue, Lowton, Warrington.

Blank: Sidney, 19 Devonshire Street, Near Broughton, Manchester, 7.

Bradshaw: Leonard Robert, 22 Hampden Road, Hornsey, N.8.

Briggs: Basil Ian, 48 Albany Street, Regent's Park, N.W.1.

Brittlebank: Eric, Greenhead Park Villa, Trinity Street, Huddersfield.

Bullimore: Gilbert, "The Nook," 151 Whitchurch Lane, Edgware, Middlesex.

Bunch: Arthur Brian, 23 Binswood Avenue, Leamington Spa, Warwickshire.

Cassells: Ralph Kennedy, c/o B. R. C. King's Buildings, Smith Square, London, S.W.

Chappell: Sidney Williams, "Willow-Dene," Moor Lane, Cranham Romford, Essex.

Clowes: George Martin, 237 Princes Road, Stoke-on-Trent, Staffs.

Craig: David Maxtone, 45 Leamington Terrace, Edinburgh.

Davidson: John William, 19 Robert Road, Meadowhead, Sheffield, 8.

Davis: Robert Victor, 23 York Street, Rugby.

Dixon: Charles John, 101 Wood Lane, Harborne, Birmingham.

Dorman: Allan, 5 Lansdowne Road, Belfast.

Elam: Brian Aubrey, "St. Margarets," Shepherds Lane, Caversham, Reading, Berks.

Ellis: Thomas Bickerstaff Harper, 5 Quernmore Road, Lancaster.

Engineer: Jehangir Bomanji, Dhun Building, Sleater Road, Batliwalla Villa, Grant Road, Bombay, India.

Ferguson: Brian, 36 Fir Street, Southport, Lancs.

Fisher: Osborne Kirkston, 10 Hensman Street, South Perth, W. Australia.

Fisk: Sidney Hubert, 51 Chichester Road, London, N.W.6.

Foreman: Robert Walter, "Cam-Bar," Fourth Avenue, Chelmsford.

Foster: Jack Stroud, 17 Whymark Avenue, Wood Green, N.22.

Fraser-Spooner: Horace Alexander, 109 Stondon Park, Forest Hill, S.E.23.

Fudge: Alan George, 18A, Oak Road, Woolston, Southampton.

Guérin: Ralph Maddison de, 7 Lambridge, Bath, Somerset.

Gwynne: Alban Patrick, c/o Wells Coates, Esq., 15 Elizabeth Street, S.W.1.

Hadfield: Colin, 62 Fulmer Road, Sheffield, 11.

Haggar: Alan Arthur, 68 Bixley Road, Ipswich, Suffolk.

Halbritter: Sidney Constantin, 31 Madeira Road, Cliftonville.

Hannam: Richard John, 20A Sackville Road, Hove.

Hare: Murray Sidney, 38 Catton Grove Road, Norwich.

Hatt: Albert Henry, 7 Defoe Avenue, Kew Gardens, Richmond, Surrey.

Hawkins: George Heslop, 10 Grasmere Terrace, Gateshead, Co. Durham.

Hayes: Francis Oswald, A. M. W. and B. Directorate, The Aerodrome, Odiham, Hampshire.

Hicklin: Francis Kenneth, 155 Gerard Street, Derby.

Hogben: Dennis Alexander, 33 New Street, Ashford, Kent.

Holtby: Richard, Melton Hill, Brough, East Yorkshire.

Humphrys: Derrick Raymond, Aviemore, Surrenden Road, Brighton.

Hunt: Leslie Edward George, 17 Park Ridings, Hornsey, London, N.8.

Hurst: Ronald Walker, Tudor Cottage, Hangleton Road, Brighton.

Hutchison: Robert Forbes, "Mount Pleasant," Victoria Road, Kirkcaldy, Fife.

Jackson: John Alan, 35B Brigstock Road, Thornton Heath, Surrey.

Johnson: Frank William, 22 Bridge Street, Tutbury, Near Burton-on-Trent.

Kinton: Robert Kenneth, 8 Forest Gate, Anstey, Nr. Leicester.

Kretser: Ronald George Kenneth de, 29 Ladbroke Gardens, Kensington Park Road, London, W.11.

Laker: Robert Alexander, 8 North Road, Walthamstow, E.17.

Leathem: James Wardle, 13 Hayward Avenue, Seaton Delaval, Northumberland.

Lee: Charles, 12 Bonchurch Road, Ladbroke Grove, W.10.

Lilley: Victor George, 25A King Street, King's Lynn, Norfolk.

Lock: Sidney Charles, 2 Greyland Terrace, Middle Deal Road, Deal.

Lomas: James Philipps, "Langroyd," Onchan, Isle of Man.

Lovelace: Walter James, 48 Wavendon Avenue, Chiswick, W.4.

Lovell: Henry Wayne, 69 Selwyn Avenue, Richmond, Surrey.

Lucas, Sydney Walter, 13 Blakesley Road, South Hurstville, New South Wales, Australia.

Luck: Leslie Llewellyn, 268 Chichester Road, Copnor, Portsmouth.

MacLynn: Cormac Thomas, 42 Thorndale Avenue, Belfast.
Meldrum: Robert Gillespie, 814 Endsleigh Court, Upper Woburn Place, London, W.C.1.
Middleton: Leonard Sydney, 50 Pagitt Street, Chatham, Kent.
Mills: David Butler, Regnal House, 6 Eccleston Street, London, S.W.1.
Mills: Edward David, 29 Rectory Lane, London, S.W. 17.
Morris: William Rowland, 139 Park Road, Worcester Park, Surrey.
Moss: Gordon Kenneth, 143 Hearsall Lane, Coventry.
Nicholls: Alfred, 1 Rosedale Avenue, Allerton, Bradford, Yorks.
North: Lionel Charles, The New Inn, Morn Hill, Winchester, Hants.
Owen: Walter Glyn, "Glyngarth," Nursery Road, Stockton Brook, Stoke-on-Trent, Staffs.
Palshikar: Shripad Shankar, c/o Messrs. Gregson, Batley and King, Chartered Bank Building, Fort, Bombay, India.
Pardoe-Williams: Ronald Spicer, The Blue Cap Hotel, Callington, Cornwall.
Pearson: Gordon, 135 Park Avenue, Northfleet, Kent.
Peat: Edgar Fowler, 8 Priory Street, Cheltenham Spa, Glos.
Peverley, Charles Eric, 21 Thorne Road, Doncaster.
Pite, Frederick Robert, Christ Church Vicarage, 123 Main Road, Sidcup, Kent.
Powell: Herbert John, 29 Cotterell Street, Hereford.
Preece, Ernest John, 90 Albert Road, Birmingham, 6.
Prince: Dorian Herbert Stanley, 16 Sudley Road, Bognor Regis, Sussex.
Pye, Richard, "Wawanesa," Poulton Road West, Poulton-le-Fylde.
Reuben: Reuben Simon, c/o Messrs. Simon and Co., Commissariat Building, Hornby Road, Bombay, India.
Reuben: Solomon Simon (Jnr.), c/o Messrs. Simon and Co., Commissariat Building, Hornby Road, Bombay, India.
Riley: Charles Frederick, "Colby House," Polefield Road, Blackley, Manchester.
Rossignol: John Augustin Le: 7 St. John's Road, Harrow, Middlesex.
Rymills: Wilfred George, 58 Henley Street, Oxford.
Sanders: Thomas Bale, 68 The Avenue, London, W.13.
Sandon: Eric Charles Rothwell, "Lords Waste," Bredfield, Woodbridge, Suffolk.
Scott: Gilbert Preston, 15 Lancing Road, Orpington, Kent.
Searson: Harry Lawrence, 2 Fletcher Street, Heanor, Notts.
Sharma: Charah Das, c/o J. R. Anderson, Esq., Mason Building, The Mall, Lahore, India.
Sketchley: John Ratcliffe, 5 De Montfort Terrace, Loughborough.
Smith: Clarence Arnold Stanley, Wootton Old Farm, New Milton, Hants.
Steel: Reginald Charles Thomas, 48 Wickham Avenue, Shirley, Croydon.
Taraporvala, Dorabji Vicaji, 621 Parsi Colony, Dadar, Bomday.
Thomas: Arthur Albert, 85 Hawstead Road, London, S.E.6.
Thomson: William Frederick, Lloyds Bank House, Midsomer Norton, Near Bath, Somerset.
Tucker: Eric Gordon, 4 Seymour Place, Park Town West, Johannesburg, South Africa.
Vowell: Austin James Foster, 11 Clive Avenue, Hastings.
Wagg: Donald, 136 Crow Lane East, Newton-le-Willows, Lancs.
Webster: Douglas Alan Stuart, 44 Lowndes Square, London, S.W.1.
Whitaker: Robert, 27 Hind Street, Burnley.
White: Henry Alfred, "Wharfemead," Bickley, Kent.
White: Myles Frederic, Bracken Dene, Jenny Beckets Lane, Mansfield.
Whyte: George Johnston, 14 Dinsmore Road, Balham, S.W.12.
Wilks: John Chapman, 91 Station Road, Ashford, Kent.
Woodnoth: Hubert Wills, 88 Rodenhurst Road, Clapham Park, London, S.W.4.
Wooster: Clive Edward Doré, "Alfriston," Horsey Road, Billericay.
Wormald: Ronald Dodd, 165 Blackwell Road, Carlisle, Cumberland.
Wright: Alec Michael John, 117 Balgores Lane, Squirrels Heath, Romford, Essex.

Notices

AMENDMENTS TO R.I.B.A. BYE-LAWS

We print below a copy of a notification received from the Privy Council approving the amendment which was approved at the Special General Meetings held on 15 April and 13 May, 1935:

At The Council Chamber, Whitehall,
The 24th day of June, 1935.

By the Lords of His Majesty's Most Honourable Privy Council.

WHEREAS the Royal Institute of British Architects has, at a Special General Meeting in exercise of the powers in that behalf conferred on it by the Supplemental Charter dated the 28th day of March 1887, by Resolution of the 15th April, 1935, made certain amendments in the Bye-laws of the said Institute; which Resolution was confirmed at a Special General Meeting on the 13th May, 1935:

And Whereas by Article 33 of the said Supplemental Charter it is provided no Bye-laws shall be of any force or validity whatever unless and until they have been approved by the Lords of the Council:

And Whereas the said amendments of the Bye-Laws have been submitted to the Lords of the Council for allowance:

NOW, THEREFORE, Their Lordships, having taken the said amendments in the Bye-laws into consideration, are pleased to allow the same as set forth in the Schedule to this Order.

M. P. A. Hankey.

Schedule

Amendments in the Bye-laws of the Royal Institute of British Architects.

Add the following new Bye-law 43*a*:—

"43*a*. In order to comply with the provisions of the Scientific Societies Act, 1843, it is declared that the Council may not make any dividend, gift, division or bonus in money unto or between any of the members of the Royal Institute."

ANNUAL SUBSCRIPTIONS

Members' subscriptions, Students' and Subscribers' contributions became due on 1 January 1935.

The amounts are as follows:—

Fellows	£5 5 0
Associates	£3 3 0
Licentiates	£3 3 0
Students	£1 1 0
Subscribers	£1 1 0

Note.—By a resolution of the Council dated 20 July 1931, the subscriptions of R.I.B.A. members in the transoceanic Dominions who are also members of allied societies in those Dominions are reduced to the following amounts as from 1 January 1932:—

Fellows	£3 3 0
Associates	£2 2 0
Licentiates	£2 2 0

COMPOSITION OF SUBSCRIPTIONS FOR LIFE MEMBERSHIP

Fellows, Associates and Licentiates of the Royal Institute may become Life Members by compounding their respective annual subscriptions on the following basis:—

For a Fellow by a payment of £73 10s. (70 guineas).

For an Associate or Licentiate by a payment of £44 2s. (42 guineas), with a further payment of £29 8s. on being admitted as a Fellow.

In the case of members in the transoceanic Dominions who are members of allied societies in those Dominions, the following basis will operate:—

For a Fellow by a payment of £52 10s. (50 guineas).

For an Associate or Licentiate by a payment of £31 10s. (30 guineas), with a further payment of £21 (20 guineas) on being admitted as a Fellow.

Provided always that in the case of a Fellow or Associate the above compositions are to be reduced by £1 1s. per annum for every completed year of membership of the Royal Institute after the first five years, and in the case of a Licentiate by £1 1s. per annum for every completed year of membership of the Royal Institute, with a minimum composition of £6 6s. in the case of Fellows and £4 4s. in the case of Associates and Licentiates.

NEW CLASSES OF RETIRED MEMBERS

Under the provisions of the revised Bye-law No. 15 applications may now be received from those members who are eligible for transfer to the class of "Retired Fellows," "Retired Associates," or "Retired Licentiates."

The revised Bye-law is as follows:—

"Any Fellow, Associate or Licentiate who has reached the age of fifty-five and has retired from practice may, subject to the approval of the Council, be transferred without election to the class of 'Retired Fellows,' 'Retired Associates,' or 'Retired Licentiates,' as the case may be, but in such case his interest in, or claim against the property of, the Royal Institute shall cease. The amount of the annual subscription payable by such 'Retired Fellow,' 'Retired Associate' or 'Retired Licentiate' shall be £1 1s. 0d., or such amount as may be determined by resolution of the Council, excepting in the case of those who have paid subscriptions as full members for thirty years, and who shall be exempt from further payment. A 'Retired Fellow,' 'Retired Associate,' or 'Retired Licentiate' shall have the right to use the affix of his class with the word 'Retired' after it, shall be entitled to receive the JOURNAL and *Kalendar*, shall be entitled to the use of the Library, and shall have the right to attend General Meetings, but shall not be entitled to vote. A 'Retired Fellow,' 'Retired Associate' or 'Retired Licentiate' shall not engage in any avocation which in the opinion of the Council is inconsistent with that of architecture. Nothing contained in this Bye-law shall affect the rights of persons who at the date of the passing of this Bye-law are members of the classes of 'Retired Fellows' and 'Retired Members of the Society of Architects.'"

PROFESSIONAL INDEMNITY INSURANCE

The Practice Standing Committee and the Council, in directing the attention of members to the article by Mr. Maurice Webb, Chairman of the A.B.S. Insurance Committee, published in the JOURNAL of 9 February 1935, on pages 456–457, would urge upon members the importance of insuring against claims which may be made against them by clients.

As pointed out by Mr. Webb, only 15 per cent. of independent practising architects in the United Kingdom are insured against such claims and, further, that fact makes it incumbent upon underwriters to charge premiums considerably higher in rate than would be necessary if the profession generally made a practice of insuring.

Members, therefore, who are not at present covered by a professional indemnity policy are urged, both in their own interests and in the interests of the profession as a whole, seriously to consider the points in Mr. Maurice Webb's article and write to the Secretary of the A.B.S. for full particulars of the policies which are obtainable.

THE CODE OF PROFESSIONAL PRACTICE

Upon the recommendation of the Practice Standing Committee the Council have made the following amendments to the Code of Professional Practice:—

Clause 2 and *Directorships of Companies*: That the footnote referring to this clause be amended as follows:—

"Note.—The regulation with regard to directorships will come into force as from 23 March 1935, but in cases where Architects are already directors of companies carrying on any of the above excepted trades or businesses (1) the regulation will not become effective until 23 March 1937, and (2) until that date the provisions of Clause 2 of the Code as it appeared before revision on 23 March 1935 must be complied with, viz., "If an Architect own or have a commercial interest either as a director of a company, or as a consultant or adviser or as a shareholder, in any material, device, or invention used in a building, he must inform his client thereof, and must obtain his sanction before specifying the use of it in works under his direction."

Clause 5. That the present Clause be deleted and the following new clause substituted:—

"An Architect on being approached to proceed with professional work upon which another Architect was previously employed shall notify the fact to such Architect."

Clause 7. That the following words which appear in brackets be deleted:—

"except for duplicate copies of drawings of documents."

MEMBERS AND PROFESSIONAL AFFIXES

The Council's attention has been called more than once to the practice, among some members, of adding a string of letters of doubtful value to the affix indicating membership of the Royal Institute on their letter paper.

This is a matter in which the Council obviously cannot dictate to members, and must trust to their good sense. It should be obvious, however, that the affix of a chartered body of high standing is weakened in effect by the addition to it of a string of other mysterious designations, some of which probably indicate no more than the payment of an annual subscription.

OVERSEAS APPOINTMENTS

When members are contemplating applying for appointments overseas they are recommended to communicate with the Secretary R.I.B.A., who will supply them with any available information respecting conditions of employment, cost of living, climatic conditions, etc.

NEW BUILDING MATERIALS AND PREPARATIONS

The Science Standing Committee wish to draw attention to the fact that information in the records of the Building Research Station, Garston, Watford, is freely available to any member of the architectural profession, and suggest that architects would be well advised, when considering the use of new materials and preparations of which they have had no previous experience, to apply to the Director for any information he can impart regarding their properties and application.

THE NATIONAL ASSOCIATION OF WATER USERS

Members are reminded that the National Association of Water Users, on which the R.I.B.A. is represented, exists for the purpose of protecting the interests of consumers.

Members who experience difficulties with water companies, etc., in connection with fittings are recommended to seek the advice of the Association. The address of the Association is 46 Cannon Street, London, E.C.4.

DISCIPLINARY ACTION

Mr. Frederick Stanley Haynes, of 39 Somervell Road, South Harrow, Middlesex, a Fellow, was reprimanded by decree of the Council dated 24 June 1935, made pursuant to the Bye-laws.

CESSATION OF MEMBERSHIP

Under the provisions of Bye-law 21, the following has ceased to be a member of the R.I.B.A.:—

As Fellow

Captain Herbert Reginald Cowley

Competitions

The Council and Competitions Committee wish to remind members and members of Allied Societies that it is their duty to refuse to take part in competitions unless the conditions are in conformity with the R.I.B.A. Regulations for the Conduct of Architectural Competitions and have been approved by the Institute.

While, in the case of small limited private competitions, modifications of the R.I.B.A. Regulations may be approved, it is the duty of members who are asked to take part in a limited competition to notify the Secretary of the R.I.B.A. immediately, submitting particulars of the competition. This requirement now forms part of the Code of Professional Practice in which it is ruled that a formal invitation to two or more architects to prepare designs in competition for the same project is deemed a limited competition.

PROPOSED COMPETITION FOR NEW OFFICES, HINDUSTHAN CO-OPERATIVE INSURANCE SOCIETY, LIMITED, CALCUTTA

Members of the Royal Institute of British Architects and of its Allied Societies must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

BOLTON: NEW MUNICIPAL TECHNICAL COLLEGE

The Corporation of the County Borough of Bolton invite architects of British nationality to submit, in competition, designs for a new Municipal Technical College proposed to be erected in Manchester Road, Bolton.

Assessors: Mr. J. Bradshaw Gass [*F.*] and Mr. A. J. Hope [*F.*].
Premiums: £500, £250 and £100.
Last day for receiving designs: 31 October 1935.
Last day for questions: 17 August 1935.

Conditions of the competition may be obtained on application to Mr. John A. Cox, M.A., Director of Education, Education Offices, Bolton. Deposit £2 2s.

BRIGHTON: NEW FIRE STATION

The Council of the County Borough of Brighton invite architects of British nationality and resident in the British Isles to submit in competition designs for a new Fire Station.

Assessor: Mr. Stanley G. Livock [*F.*].
Premiums: £200, £125 and £75.
Last day for receiving designs: 5 October 1935.
Last day for questions: 30 July 1935.

Conditions of the competition may be obtained on application to Mr. J. G. Drew, Acting Town Clerk, Town Hall, Brighton. Deposit £1 1s.

HERTFORD: NEW CENTRAL COUNTY BUILDINGS

The Hertfordshire County Council invite architects to submit, in competition, designs for new Central County Buildings to be erected at Hertford.

Assessor: Mr. Robert Atkinson [*F.*].
Premiums: £350, £250 and £150.
Last day for receiving designs: 1 October 1935.
Last day for questions: 1 July 1935.

Conditions may be obtained on application to The Clerk of the County Council, Clerk of the Peace Office, Hertford. Deposit £2 2s.

LIVERPOOL: LAY-OUT OF BUILDING ESTATE, DESIGN OF HOUSES, GARDENS, ETC.

The Liverpool Building Trades Exhibition invite architects of British nationality to submit in competition designs showing the lay-out of a building estate and the design of houses, gardens, etc. Drawings required are divided into seven sections comprising lay-out, plans, elevations, perspectives, etc., and a prize of £10 is offered for the best design in each section. There is also a prize of £10 for the best report and a further £30 to be distributed in accordance with the Assessors' recommendations.

Assessors: Lt.-Col Ernest Gee R.E. [*F.*], President of the Liverpool Architectural Society; Professor Patrick Abercrombie, M.A. [*F.*]; Mr. Leonard Barnish.

Last day for receiving designs: 2 September 1935.

Conditions of the competition may be obtained on application to the Competition Manager, Provincial Exhibitions, Ltd., Renshaw Hall, Renshaw Street, Liverpool, 1.

PORTSMOUTH: LAY-OUT OF LUMPS FORT SITE

The Corporation of the City of Portsmouth invite architects to submit, in competition, designs for the lay-out of an area known as Lumps Fort.

Assessor: Mr. E. Prentice Mawson, M.T.P.I. [*F.*].

Premiums: £350 and £200 to be divided between the authors of not more than three designs placed next in order of merit.

Last day for receiving designs: 16 October 1935.
Last day for questions: 31 July 1935.

Conditions of the competition may be obtained on application to Mr. F. J. Sparks, Town Clerk, The Guildhall, Portsmouth. Deposit £2 2s.

SWINDON: NEW MUNICIPAL OFFICES

The Corporation of Swindon invite architects of British nationality and resident in the British Isles to submit, in competition, designs for new Municipal Offices.

Assessor: Mr. A. B. Knapp-Fisher [*F.*].
Premiums: £350, £250 and £150.

Last day for receiving designs: 31 August 1935.
Last day for questions: 25 May 1935.
Conditions of the competition may be obtained on application to the Town Clerk, Town Hall, Swindon. Deposit £1 1s.

YORK: NEW MUNICIPAL OFFICES, CLINICS, ETC.

The Corporation of York invite architects of British nationality and domiciled in the United Kingdom to submit, in competition, designs for new Municipal Offices, Clinics, etc.
Assessor: Mr. Henry V. Ashley [*F.*].
Premiums: £250, £150, £100 and £50.
Last day for receiving designs: 1 November 1935.
Last day for questions: 29 July 1935.
Conditions of the competition may be obtained on application to Mr. Reginald Anderson, Town Clerk, Guildhall, York. Deposit £1 1s.

COMPETITION RESULTS

BISHOPSGATE: NEW POLICE STATION, HOSPITAL AND BUILDINGS

1. Messrs. Vine and Vine [*AA.*] (London).
2. Mr. E. Berry Webber [*A.*] (London).
3. Mr. Maurice G. Wardley [*A.*] (Sutton).

GLASGOW: FOUR-APARTMENT COTTAGE

1. Mr. Samuel McColl [*A.*] (Paisley).
2. Messrs. James Hay and Steel (Kilmarnock).
3. Messrs. J. and J. A. Carrick [*L.A.*] (Ayr).
4. Mr. Alexander Cullen [*F.*] (Hamilton).

Members' Column

PARTNERSHIP WANTED

L.R.I.B.A., M.I.Struct.E., seeks partnership. Has been employed in good London offices. 23 years' experience, including 5 years in America and 14 years in private practice. Widely travelled. Conversant with all kinds of work. Box No. 5735, c/o Secretary R.I.B.A.

A.R.I.B.A., 17 years' experience in all branches of the profession, desires Junior Partnership or Senior post with a view to partnership. Some capital available. Reply Box No. 2565, c/o Secretary R.I.B.A.

A.R.I.B.A. UNIVERSITY GRADUATE (1st Class Hons. B.Arch. Liverpool) seeks partnership. Has had experience in good offices in England and the United States, and in the preparation of competition drawings. Is young, has travelled widely, and has special qualifications in design, including the Rome Scholarship and the Victory Prize of the R.I.B.A. Box No. 2255, c/o Secretary R.I.B.A.

COLLABORATION OR ASSISTANCE OFFERED

ASSOCIATE in private practice, Bartlett School trained, would like to collaborate with another architect also in practice, in Competitions; or will give assistance in his own office to architects who urgently require immediate help in their practices. Box No. 3065, c/o Secretary R.I.B.A.

NEW PRACTICE

Mr. JULIAN LEATHART, F.R.I.B.A., has now commenced in practice independently. His new address is 39 Gordon Square, London, W.C.1. Telephone No.: Museum 8884.

MR. W. FRASER GRANGER, F.R.I.B.A., has now commenced in practice independently. His new address is 9 Savile Row, London, W.1. Telephone No. REGent 5539.

CHANGE OF ADDRESS

MR. VERNER O. REES [*F.*] has moved his office to 33 Bedford Place, London, W.C.1. Telephone: Museum 7320.

MR. A. H. S. MEGAW's address is now as follows: 3 Fort William Drive, Belfast, N. Ireland.

NEW PARTNERSHIP

MR. F. ADAMS SMITH [*F.*] has taken into partnership his son, Mr. F. Halliburton Smith [*A.*]. The future style of the firm will be F. Adams Smith and Son, 35 New Broad Street, E.C.2. Telephone No. London Wall 4700.

Architects' and Surveyors' Approved Society

ARCHITECTS' ASSISTANTS' INSURANCE FOR THE NATIONAL HEALTH AND PENSIONS ACTS

Architects' Assistants are reminded that the Architects' and Surveyors' Approved Society deals with questions of insurability for the National Health and Pensions Acts (for England), under which, in general, those employed at remuneration not exceeding £250 per annum are compulsorily insurable.

In addition to the usual Sickness, Disablement and Maternity Benefits, this Society makes grants towards the cost of dental or optical treatment (including provision of spectacles).

No membership fee is payable beyond the normal Health and Pensions Insurance contribution.

As the R.I.B.A. has representatives on the Committee of Management, insured Assistants joining the Society can rely on prompt and sympathetic settlement of claims.

Applications for the Society's Prospectus should be made to the Secretary, Architects' and Surveyors' Approved Society, 26 Buckingham Gate, London, S.W.1.

A.B.S. Insurance Department

PENSION AND FAMILY PROVISION SCHEME FOR ARCHITECTS

This scheme has been formulated by the Insurance Committee of the Architects' Benevolent Society and is available to all members of the R.I.B.A. and its Allied and Associated Societies.

The benefits under the scheme include:—

(1) A Member's Pension, which may be effected for units of £50 per annum, payable monthly and commencing on attainment of the anniversary of entry nearest to age 65. This pension is guaranteed over a minimum period of five years and payable thereafter for the remainder of life.

(2) The Beneficiary's Pension, payable as from the anniversary mentioned in Benefit No. 1, but to the widow (or other nominated beneficiary) if the member dies before age 65. The amount of this pension is adjusted in accordance with the disparity between the ages of the member and his wife.

(3) Family Provision. Under this benefit a payment of £50 yearly is made to the dependent from the date of death of the member prior to age 65 until attainment of the anniversary previously mentioned, after which benefit No. 2 becomes available.

Provision can be made for any number of units (of £50 per annum) up to a maximum of £500 per annum.

Pension benefit only may be secured if desired and the pension commuted for a cash sum.

Members are entitled to claim rebate of Income Tax on their periodical contributions to the scheme both in respect of pension and of family provision benefit.

Full particulars of the scheme will be sent on application to the Secretary, A.B.S. Insurance Department, 66 Portland Place, W.1.

R.I.B.A. JOURNAL

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